EXHIBIT A

SUPPLEMENTAL INDEPENDENT ASSESSMENT OF SALE OF SELECTED BLACKJEWEL ASSETS CASE NO. 19-30289

Prepared For

SQUIRE PATTON BOGGS

By

John T. Boyd Company
Mining and Geological Consultants
Pittsburgh, Pennsylvania, USA

Report No. 3780.003

AUGUST 2022

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August 12, 2022
File: 3870.003

Scott A. Kane, Esq.
Squire Patton Boggs
201 E. Fourth Street, Suite 1900
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Subject: Supplemental Independent Assessment of Sale of Selected Blackjewel Assets
Case No. 19-30289

Dear Mr. Kane:

My name is John L. Weiss, and I am a Vice President at John T. Boyd Company (BOYD). As requested by Squire Patton Boggs (SPB), I previously presented my findings and opinions in a report dated August 31, 2021, regarding, among other things, the cash consideration obtained during the forced liquidation of selected assets of the estates of Blackjewel L.L.C. and certain related entities (Blackjewel).

Consistent with a recent order of the Court, this report supplements my original report, including to explain further the basis for my opinion that the forced liquidation of Blackjewel assets on an expedited basis resulted in significantly less consideration than would have been received in an orderly liquidation.

My independent opinions presented in this report rely upon information provided by SPB or obtained from publicly available sources. Source data are supplemented by my general industry knowledge. Should additional information or documentation become available following the submission of this report, I reserve the right to modify, change, or otherwise supplement the independent opinions presented herein.

My independent opinions, which are based on my education, training, knowledge, and experience, are consistent with

prudent industry standards and engineering practices. The opinions presented herein are stated to a reasonable degree of professional certainty. Neither my compensation nor BOYD's is determined by the opinions presented in this report or the outcome of the case.

Qualifications and Data Relied Upon

The independent opinions presented in this report rely upon information provided by SPB. In preparing this report, I utilized ownership, operations, cost, sales, and financial data as provided by SPB, and further assumed that information provided by SPB and assembled by FTI were prepared by competent staff and are accurate. I principally relied upon the following in the formation of my opinions:

1. Various sale orders associated with forced of Blackjewel assets, including summary data prepared by FTI.
2. Blackjewel motion for emergency DIP financing filed July 1, 2019 ($20 million loan amount).
3. 2018 Mine-by-Mine financials summarized by FTI prepared August 18, 2021.
4. Blackjewel motion for emergency interim DIP financing filed July 3, 2019 ($5 million loan amount).
5. Blackjewel 1Q2019 Mine-by-Mine Profit & Loss statement as prepared by FTI August 18, 2021.
6. Blackjewel LLC cash flow actuals (FTI).
7. Blackjewel LLC West cash flow forecast prepared by FTI August 17, 2021.
8. Blackjewel LLC monthly sales forecast 2019 prepared by Blackjewel July 5, 2019.
9. Blackjewel DIP and Sale Process Agenda July 5, 2019, as prepared by Jeffries.

I received many documents during the course of my engagement in this case; these are summarized in Appendix A. Such information was accepted as presented, and I did not identify or otherwise observe any material misrepresentations, errors, and/or obvious omissions. My findings and opinions presented herein could change should it be determined that inaccurate or otherwise erroneous data were incorporated in the documentation provided in this matter.

Should additional information or documentation become available following the submission of this report, I reserve the right to modify, change, or otherwise supplement the independent opinions presented herein.

The opinions presented herein, which are based on the business and operational aspects of the mining and minerals industry, are stated to a reasonable degree of certainty in such matters.

My resume (which includes my hourly rate and publications) and history of expert witness testimony are attached in Appendix B.

Respectfully submitted,

JOHN T. BOYD COMPANY
By:

John L. Weiss
Vice President

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1.0 CAPABILITY STATEMENT

1.1 My Valuation Experience

I have been a consultant at BOYD for more than 32 years. My main area of expertise during these years of providing professional services to clientele has been the financial analysis and valuation of coal mining assets, including reserves, mines, and mining entities. The majority of my billable time at BOYD since 1990 has been spent on financial analyses and the valuation of mining assets.

I have been involved in no fewer than 130 projects requiring the valuation of coal mining assets in Central Appalachia (CAPP), the Powder River Basin (PRB), and beyond. At least 70 of these assignments have been performed for businesses seeking to acquire coal mining assets: engagements that specifically involved advising the potential purchasers on the price they should set for their bids. I am familiar with valuations that are conducted under less-than-ideal circumstances; approximately one-third of the valuation projects were constrained in some manner within the sale process, including limitations such as compressed time-periods, lack of data, and restrictions regarding site access.

In no fewer than 19 of these valuation engagements, the bids of my clients were accepted and led to the consummation of a coal asset sale. Transaction amounts have covered the full range of the coal spectrum, with transactions broadly diversified across relatively small deals (from hundreds of thousands of dollars to $100 million), mid-sized deals (between $100 million and $500 million), and large deals (from $500 million and into the billions of dollars).

My coal valuation projects are not limited to work for potential buyers. I also regularly advise sellers of coal assets on the price at which they should sell coal assets as well as lenders seeking guidance on whether to issue debt backed by coal mining assets. The objectives of buyers, sellers and lenders are not identical, but the approaches that they utilize are very much consistent and aligned.

For the past 79 years, the valuation of reserves and mining assets has represented a major part of BOYD’s core business, and my work as well. This includes the monitoring of transactions that take place in the US coal industry. Certain deals are reported in the public domain in a transparent and detailed manner. This is often the case when transactions involve publicly traded entities, where documentation may become publicly

available per SEC reporting requirements and may include the identities of the buyer and the seller, transaction values, operational parameters, specific assets, and, occasionally, other key components (production levels, coal qualities, reserve details, contractual positions, liabilities, etc.).

When an asset sale is completed in a confidential manner between private entities, the level of publicly available information may instead be limited or otherwise obfuscated. While neither BOYD nor I can disclose proprietary data gathered in the ordinary course of confidential assignments, the exposure to such work contributes to my training, education, knowledge, and experience, and provides me with significant insight regarding the valuation of certain Blackjewel assets.

1.2 Other Background and Experience

BOYD is a privately held mining and geological consultancy based in Canonsburg, Pennsylvania (near Pittsburgh). BOYD has an office in Denver, Colorado, plus three international offices: Brisbane (Australia); Bogota (Colombia); and Beijing (China).

BOYD has provided a wide range of professional advisory services regarding the mining and mineral industries to a diverse client base since 1943. Our domestic and international clientele include mining companies, investors, utilities, financial institutions, attorneys, governmental agencies, reserve owners, equipment manufacturers, railroads, and other participants in the mining and mineral industries. BOYD has had unparalleled exposure to a vast array of coal and mineral properties, including access to commercial data and technical documentation, during the course of our assignments for our clientele.

BOYD's full time staff is comprised of engineers, geologists, mineral economists, financial analysts, and other professionals. BOYD has expertise in all primary aspects of the mining industry: geology and reserves; valuations and appraisals; geotechnical analysis; operational assessments; surface and underground mining operations; mine planning; strategic business plans; mineral processing and material handling; environmental assessments; market and transportation analysis; price forecasting; competitor analysis; financial analysis; litigation support; and mine health and safety.

We have extensive experience in metals, non-metals, aggregates, and building materials, but our primary experience has been in coal. We have performed thousands of coal-related assignments, and we have worked in dozens of countries and every major coal-producing basin of the United States. This includes extensive experience in

CAPP and the PRB. We monitor coal industry transactions on an ongoing basis through publicly available documentation, proprietary data, and our network of industry contacts. We have assessed and evaluated thousands of coal mining operations over the decades, and have extensive experience in coal mining activities, coal leasing, financial analysis of mines/mining entities, appraisals/valuations, geology, reserve estimation, and other aspects of mining operations.

My career in the mining industry began in 1981 as a general laborer in an underground coal mine operated by Mettiki Coal Corporation. From 1985 to 1990, I worked for Consolidation Coal Company as an industrial engineer, a safety inspector, and foreman in an underground coal mine. I have been employed at BOYD since 1990, and I have been a Vice President since 1998. My work at BOYD over the past 32 years has been diverse, but the majority of my assignments have focused on coal mining operations and related assets. I routinely provide technical and financial advisory services to participants in the industry as it relates to coal reserves, operating mines, coal processing and handling facilities, and mining companies. I have been the principal author of Mineral Expert Reports that are filed with the Securities and Exchange Commission (or international equivalents) for valuation of coal reserves and mining entities.

Over the course of my career, I have had the opportunity to observe first-hand the mining conditions, infrastructure, and operating practices at coal mines, plants, and mining complexes throughout North America, Europe, Africa, Asia, and Australia. I have visited more than 300 coal mines and dozens of coal preparation plants. Documentation obtained while performing these diverse assignments is comprised of business plans, reserve studies, permits, asset ledgers, mining maps, equipment specifications, leases, contractual agreements, cost statements, and many other items. While proprietary information acquired during the course of other assignments remains confidential and cannot be utilized or disclosed, my participation in these projects over the decades provides me with a solid foundation to offer informed and supported opinions.

I have a Bachelor of Science Degree in Mining Engineering from The Pennsylvania State University (1983), and I am licensed as a professional engineer. I am a certified mine foreman and possess various certifications from the Mine Safety and Health Administration. I am a Registered Member of the Society of Mining, Metallurgy, and Exploration, Inc. I have provided expert witness testimony in a variety of cases related to the mining and minerals industry.

2.0 BLACKJEWEL BACKGROUND

2.1 Blackjewel Operating Regions

Blackjewel was a coal mining, processing, and selling company comprised of various producing and non-producing properties and entities. Its principal holdings were situated in CAPP and the PRB.

CAPP is a mature coal-producing region spanning southern West Virginia, eastern Kentucky, western Virginia, and northeastern Tennessee. Commercial mining operations within CAPP date to the 1800s, and regional mining operations are more diverse than those found in any other US coal-producing region. Mining operations are planned and implemented based on the site-specific geology and reserves of each deposit. Accordingly, mine operators utilize a variety of surface (opencast) and underground mining methods to extract coal from sites that have operating lives ranging from short (a few years) to long (several decades). Production rates at CAPP mines can be small (less than 100,000 tons/year) to substantial (more than 1 million tons annually). Coal seams are the thinnest mined in the United States; most CAPP production is from coal seams that are 2 ft to 5 ft in thickness, but may range from less than 1 ft to (rarely) more than 10 ft.

Essentially all CAPP underground production and the vast majority of surface output is processed in coal preparation facilities that remove high-ash material (principally out-of-seam roof and floor strata that are extracted during the routine mining process) in order to achieve desired product quality specifications. Many different coal seams are mined in CAPP, and production may be sold to thermal (power generation) or metallurgical (steelmaking) customers.

CAPP mining costs ($/ton basis) are the highest of any US coal-producing region given the depletion of the most easily mineable reserves. Production economics, coupled with the declining demand for thermal coal, have resulted in a significant reduction in the number of active CAPP mines in the past 20 years. Operating CAPP mines in the 1990s previously numbered in the thousands; the number of producing mines in the past several years has been in the 200 to 300 range. Given the premium pricing of metallurgical coal compared to thermal coal products, the majority of current CAPP output is directed to the higher-priced metallurgical coal market. CAPP produces about two-thirds of domestic metallurgical coal output, most of which is shipped via seaborne vessels to international customers.

In contrast to CAPP mining operations, which are characterized as diverse, PRB mining operations (situated in Wyoming and Montana) are quite similar. In 2019 there were only 17 high-volume surface mines, each of which produced between 2.5 million tons and 85 million tons annually. Production activities are relatively simple; each mine utilizes large-scale surface mining equipment to extract thick coal seams (approximately 30-ft to 110-ft thick) at low strip ratios (between about 2.5:1 and 5.5:1). Coal is crushed and sold raw (unprocessed) as one of two primary thermal products (either 8,800 Btu/lb or a lower-priced 8,400 Btu/lb product), with price adjustments for quality.

PRB mines tend to have broadly comparable cost structures; operating costs are low ($/ton basis) compared to other US production regions, while transportation costs (rail service from mine sites to customers) are routinely more than the selling price of the coal. Mines generally have significant reserves, thereby supporting long operating lives that enable the costs of final reclamation to be deferred for years. PRB remains the largest thermal coal region in the United States.

2.2 Blackjewel Bankruptcy

Blackjewel and certain associated entities filed a voluntary petition for relief under Chapter 11 of Title 11 of the United States Code in the United States Bankruptcy Court for the Southern District of West Virginia on July 1, 2019. The initial actions and procedures associated with this filing included customary elements in the restructuring process: retention of professionals, the use of cash collateral, and debtor-in-possession (DIP) financing.

The contemplated DIP facility was to be funded by Clearwater Investment Holdings LLC and Mr. Jeff A. Hoops, Sr. along with his associated entities. United Bank withheld release of such funds on the day of the bankruptcy filing, and Blackjewel was unable to move forward with the relief sought.

Blackjewel’s situation on the afternoon on the first day of the case was that of immediate insolvency: it was illiquid. Without the ability to meet payroll and uncertainty as to whether funds would become available, Blackjewel was forced to send employees home that day with no message as to when, or if, the employees would be recalled. This, in turn, caused the immediate cessation of mining activities on an unplanned basis; it was not an orderly shut-down of the operations, as none of the normal procedures were implemented to protect the value of the assets or even to secure the mine locations. Blackjewel, without any operating personnel, did not have the requisite trained and certified employees to conduct mandated examinations and perform ventilation,

dewatering, and other operational activities required to maintain the underground mines in an idle status (defined as non-producing yet with underground openings that were inspected and thereby physically open and accessible). Mine and administrative staff (laborers and professionals alike) were lost; I was advised that employees not only sought alternative employment but were promptly recruited by other competing regional mining companies. In particular, critical personnel such as certified foremen and skilled tradesmen (mechanics and certified electricians) were quickly hired elsewhere given the short supply of such personnel in CAPP and the PRB. Such former employees were thus unavailable to Blackjewel and prospective buyers in the event the Blackjewel mines were restarted.

On July 3, 2019, after the mines had been unstaffed for two days, a motion for an alternative $20 million in DIP financing was rejected in the bankruptcy court. Ultimately, the court approved a bridge DIP facility in the amount of $5 million to be funded by Riverstone Credit Partners with anticipation of a subsequent DIP facility; I have been advised that only $3 million was actually funded. These funds were to be used primarily to cover the costs of: (1) establishing security at the mine sites to preserve and protect equipment and property, and (2) personnel necessary to prevent a reoccurrence of a combustion event that had occurred in the prior days at the PRB mining operations. The magnitude of the approved DIP was not sufficient to allow either a resumption of normal operations or to provide a typical level of care and maintenance for the idled mines.

The blocking of the minimum necessary funds was catastrophic: Blackjewel did not have the liquidity necessary to operate, as without the ability to retain personnel, Blackjewel was unable to operate those mines that could generate positive cash flow. Similarly, the process of selling assets was also materially compromised and Blackjewel was unable to conduct an orderly liquidation process. The situation precluded the potential for interested entities to conduct reasonable and customary due diligence tours of the underground mine workings to observe operating practices, mining conditions, and the suitability and integrity of infrastructure. Further, knowledgeable Blackjewel staff—professional or otherwise—were no longer available to meet with buyers and provide insight regarding operations, reserves, future mine plans, and other business functions or data.

Thus, the loss of essential DIP financing pushed Blackjewel into an immediate and forced liquidation of its assets. The sales effort commenced immediately and was conducted rapidly. Unlike typical auctions of coal-related assets in bankruptcies, which went to auction in approximately 90 days, the auction of the Blackjewel assets commenced on August 1, 2019, just one month after the initial filing. This reduction from

three months to one month would appear to offer potential bidders just one-third of the time typically available to assess the opportunities to purchase a debtor's assets.

However, the situation regarding Blackjewel was actually worse. Prospective bidders for the Blackjewel assets were only contacted in mid-July, leaving them only about two weeks to assess the potential acquisitions. Further, the bidding procedures for the auction were not approved by the Court until July 26, 2019, less than a week before the auction took place. In contrast, bidders contacted two weeks after a bankruptcy filing during an orderly liquidation process would typically have two-and-a-half months remaining to conduct due diligence. Thus, the minimal time available to prospective bidders for the Blackjewel assets amounted to just 10% to 20% of the typical time available, which severely compromised the ability to attract entities to the bidding process. In turn, the rapidity of the forced liquidation process subsequently minimized competition and the purchase amounts offered for the Blackjewel assets.

In my 30-plus years of transaction-related work in the mining industry, I have observed many sales processes that had time constraints, limitations regarding data availability, and restrictions regarding site access. However, none of these other sales processes were as challenging in all aspects as the Blackjewel forced liquidation process, wherein virtually every aspect of the process minimized (or even prevented) opportunities to sustain viable operating activities, generate cash, promote competition among buyers, and maximize value.

It has been my experience that the vast majority of mining businesses approach acquisitions and investments in accordance with their defined or established investment and evaluation guidelines and procedures. The forced liquidation process at Blackjewel was not conducive to prospective buyers seeking to assess investment potential, as the manner in which operations abruptly ceased operations, in conjunction with the hurried sales process, made it impossible to perform due diligence and properly assess the specific mining assets. In particular, many sizable coal producers—notably publicly traded companies with bank debt, covenants, and SEC reporting requirements—were effectively excluded from the process: the forced liquidation process made it essentially impossible to perform the internal checks and balances required when seeking executive approval of and then boardroom authorization for significant investments (such as an acquisition).

Similarly, having provided valuation services to many potential lenders and financial institutions, I am familiar with the typical standards these entities use to support lending decisions. When assessing mining assets, key drivers of value include the adequacy of

reserves, the reasonableness of mining plans and associated financial projections, estimation of liabilities, the capabilities of the subject mines/facilities, etc. Ultimately, lenders will not provide financing without assurance of the value of the collateral, a step that could not be achieved within the forced liquidation process.

It is my opinion that the rapid forced liquidation process at Blackjewel discouraged numerous potential bidders from participating in the auction for individual assets due to (1) their internal constraints regarding due diligence and/or (2) the inevitable inability to procure financing from lenders.

3.0 ASSET SALES

3.1 Blackjewel Asset Sales

While Blackjewel, as a business, was insolvent, there were numerous assets that had value in the industry. This is evidenced by the fact that the forced liquidation process generated $550.4 million in total consideration from buyers, including $70.6 million in cash. It is my opinion that the consideration that Blackjewel received for these assets would have been greater in an orderly liquidation process.

The auction was conducted from August 1 to August 3, 2019, just one month after the bankruptcy filing. In contrast to orderly liquidations, potential buyers had minimal time to conduct due diligence and procure financing: there was only a span of a couple weeks from buyer notification to auction. This compressed time frame resulted in an accelerated schedule that was not sufficient for: (1) compiling the necessary operational and financial information to support the process, (2) contacting potential bidders, (3) providing documentation to them, and (4) giving these potential buyers access to the assets—all critical steps so that they could develop informed estimates of the value of individual assets.

The subject transactions from the auction are summarized as follows:

				Consideration ($ 000)						
Buyer	Asset	Location of Purchased Assets	Sale Order File Date	Cash	Royalties	Subtotal	Credit Bid	ARO	Other Liabilities	Grand Total
Mark Energy	CR - Bandmill/Tunnel Mine	Letcher Co., KY	8/9/2019	2	-	2	-	1,060	-	1,062
John Deer Const. & Forestry Co.	2- Wheel-loaders	NA	8/9/2019	227	-	227	-	-	-	227
Rhino Energy LLC	Virginia	VA	8/23/2019	850	208	1,058	-	6,070	-	7,128
Tye Fork Coal Co.	CR - Permit	KY	8/23/2019	400	-	400	-	75	-	475
Sulzer Electro Mechanical Serv., Inc.	PRB Equipment	WY	8/23/2019	50	-	50	280	-	-	330
Contura Energy Inc.	Northern	WV	8/29/2019	6,150	-	6,150	-	6,436	-	12,586
Coking Coal, LLC	Cumberland River (CR)	Virginia	8/29/2019	50	2,419	2,469	-	5,371	-	7,840
Ramaco Res. Land Hld.	Permits	McDow ell Co., WV	9/1/2019	5	-	5	-	-	-	5
Kopper Glo Mining LLC	Black Mountain	WA & KY	9/17/2019	6,800	9,520	16,320	-	38,400	-	54,720
Eagle Speciality Materials, LLC	West - PRB	VA, KY & WV	9/17/2019	53,500	-	53,500	-	326,532	70,633	450,665
Black Mountain Resources LLC	Black Mountain	KY	10/11/2019	50	1,370	1,420	135	7,067	-	8,622
Javelin Global Commodities LP	Partnership in BJMS - 30%	NA	10/11/2019	125	-	125	-	-	-	125
Dean-McAfee Lenders	Real Property	Harlan Co., KY	10/11/2019	-	-	-	4,250	-	-	4,250
Moument Mining, Inc.	Highw all Miner	NA	1/24/2020	2,400	-	2,400	-	-	-	2,400
				70,609	13,517	84,126	4,665	391,011	70,633	550,435

Notes:
1. Excludes de minimis sales
2. BJMS=Blackjew el Marketing and Sales Holding, LP

The remaining Blackjewel operations and properties were not sold at the auction. Most of these were regarded as depleted and/or subeconomic, often with reclamation obligations.

3.2 Consideration for Asset Sales

The consideration amounts associated with the individual transactions were comprised of the following components:

- Cash: With the exception of real property acquired by the Dean-McAfee Lenders, each transaction included cash upon closing.
- Royalties: Certain consideration amounts are described as royalties in four of the transactions listed above. These royalty amounts represent the net present value of certain fixed and variable payment obligations per terms of the "Royalty Agreement" or equivalent in each of the subject Orders approving the sale of the assets. Thus, these royalty payments are essentially deferred cash payments for the subject assets. Adding the stated cash and royalty amounts (represented by the "Subtotal" column above) ultimately equates to the total cash compensation paid for the subject assets. The term "royalty", as used herein, should not be misconstrued as being equivalent to the term "royalty" as is commonly utilized in coal leases.[1]
- Credit Bid: Three transactions included a "credit bid", where a lender used the value of its secured loan on collateral as its bid price for that collateral being sold at auction.
- Asset Retirement Obligations: In 8 of the 14 transactions, the successful bidder assumed the Asset Retirement Obligations (ARO) associated with the subject asset. ARO is generally described as the aggregate amount of reclamation and environmental liabilities of the permits associated with the asset, usually as represented by the total amounts of the posted surety bonds.
- Other Liabilities: This component of the western (PRB) transaction is comprised of coal royalties and associated interest ($61.5 million), post-petition accounts payable related to taxes and other payables ($4.3 million), employee costs ($1.8 million), and $3.0 million in other liabilities.

[1] In a coal leasing scenario, a royalty is defined as a payment, generally a minimum payment or a production royalty (expressed as a percentage of realization or a fixed amount per ton) from the lessee (the individual or business that is producing and/or selling the coal) to the lessor (the owner of the fee interest in the mineral).

4.0 VALUATION APPROACHES AND DUE DILIGENCE

4.1 Coal and Mineral Valuation

Coal and mineral properties, as with other forms of real property, are exchanged in an open market and thus can be valued using accepted appraisal practices and standards. However, that appraisal process can be uncertain, and estimates of value often vary among appraisers. This is particularly true with coal and other mineral properties where there may be few actual transactions, data may not be available, and the resource may be subject to a degree of uncertainty. Specific deposits may have unique geologic or economic characteristics. Accordingly, valuation of coal assets and coal-related entities requires an experienced appraiser who is knowledgeable of geological, operational, and market factors specific to the property being valued.

BOYD has appraised mineral properties for buyers, sellers, lenders, and others for nearly eight decades, and I have done so for more than 30 years. The following definitions are provided regarding the different types of values applied to coal and mineral properties:

- Fair Market Value (FMV) is the amount that a willing and informed buyer of mining properties, under no compulsion to buy, will pay, and what a willing and informed owner, under no compulsion to sell, will accept for property, after fair and voluntary dealing, and taking into account all those factors which such willing and well-informed persons would consider regarding the property in light of the customs of the industry.
- Orderly Liquidation Value (OLV) represents an expedited sale at auction where typically the price to sell or liquidate selected assets to the highest bidder is as-is, where-is. Costs associated with removal (for plant and equipment) and marketing of the selected asset for sale often are included. This type of sale typically derives a significantly lower value than FMV because of the time constraints (for example, approximately 90 days until auction in a typical recent coal bankruptcy). Potential buyers who would normally conduct due diligence must make decisions in a compressed time frame, and therefore cannot fully perform independent estimates of reserves, analyses of historical operational, financial, and sales data, and preparation of forward-looking mining and business plans. The sale is usually handled through a brokerage firm that is experienced in this auction format.
- Forced Liquidation Value (FLV) is the price resulting from a rapid or “fire” sale at auction; it is typically the price to promptly liquidate assets to the highest bidder, as-is, where-is, with a sense of immediacy compelling the seller. This type of sale typically derives a materially lower value than OLV and is usually handled through a brokerage firm that is experienced in this auction format.

4.2 Valuation Approaches

There are three generally recognized approaches to determining the value of coal and mineral properties:

- Cost Approach (also known as Replacement Cost Approach).
- Comparable Sales.
- Income Approach.

4.2.1 Cost Approach

The Cost Approach assumes bare land could be acquired and the “improvements” reproduced to achieve the equivalent or replacement cost of the subject property. The appraised value is assumed to be the cost of the bare land, plus the depreciated cost of the improvements. With virgin mineral lands, the “improvement” is typically exploration and development work, the cost of which is probably unrelated to the value of the property itself. Although the Cost Approach, or variations thereof, has application in some situations, it is seldom the most reliable appraisal method.

The Cost Approach is not an appropriate valuation methodology in this matter regarding the Blackjewel assets.

4.2.2 Comparable Sales Approach

The Comparable Sales method of valuation compares reserves and mining operations under study with similar properties that have been sold. It is desirable to base comparisons on contemporaneous transactions, and not dated transactions when market conditions were not comparable. Ideally, comparable sales case studies should be in the same general locality as the property being valued, include the same seam(s), and should have similar geologic and quality characteristics. The Comparable Sales approach is often the preferred method of valuation when reliable market and sales data are available for sites that are genuinely comparable.

In order to properly use comparable sales to assess the value of a specific asset, an analysis of each recent transaction is conducted to define critical items relating to the prior sales. Typical items considered in an assessment of comparable sales include:

- Ownership.
- Location and accessibility.
- Core hole and geologic data.
- Recoverable saleable product.
- Seam quality.
- Mining conditions.

- Stage of development.
- Environmental and permitting.
- Sales contracts.
- Seller and buyer knowledgeability.
- Highest and best use.

As an illustrative example, the comparable sales approach is frequently utilized in housing and real estate appraisals given the direct applicability of parameters such as the age of a home, square footage, lot size, and type of construction. These factors, which influence value and are specifically identified, can be readily compared to recently sold properties within the specific neighborhood or school district.

The comparable sales method can be a reasonable approach to property valuation for the occasional coal property, but it would not have been appropriate for the bulk of the mining operations auctioned by the debtors. This is due to the lack of specific comparability of individual mines/assets relative to contemporaneous sales of other mining assets. To illustrate this point, many CAPP mining operations at Blackjewel would have had broad commonalities with other regional mining assets that may have recently been sold; such general factors could include relatively thin coal seams, the application of underground mining methods, and the utilization of coal preparation facilities to meet customers' coal quality specifications. While these may offer the appearance of comparability, such factors, in isolation, are unrelated to value. Instead, the key value drivers of a mining asset include a variety of other considerations; examples include:

- The magnitude of the coal reserves of each specific asset; this determines mine life and influences annual production levels and corresponding costs/revenues.
- Geological and mining conditions at each site; site-specific conditions meaningfully influence productivity levels, mine layouts, and mandated plans (such as unique ventilation and roof control plans that are approved by state and federal mine safety agencies). These factors, which change over the life of a mine, drive future costs, capital expenditures, and cash flow.
- The status of each individual mine site; this includes operational condition (is the site actively producing, idled, or temporarily sealed?), stage of development (is it fairly new with recently capitalized facilities, or is it an aging site that is experiencing deterioration of underground mine openings and infrastructure?), capacities of refuse disposal sites (does the operation have years of refuse capacity remaining, or are sites nearly filled?). These unique factors materially contribute to value (or liability).

Given the significant differences between individual mining assets and the absence of comparable (and contemporaneous) transactions, it is my experience that informed potential buyers would not consider utilization of the comparable sales approach to estimate values of Blackjewel's individual CAPP assets.

4.2.3 Income Approach

The Income Approach is used to determine the value of an operating business. It is a valuation method based upon the existing or planned mine facilities, production, and net income being generated by the operator, which is the entity that extracts the coal and sells the subject coal products in the marketplace. Such an analysis considers the following factors:

- Status of the mine and plant facilities.
- Remaining reserves.
- Costs and sales realization.
- Projected mine plans and alternatives.

The Income Approach uses discounted cash flow analyses of the estimated cash flows of a project to determine the net present value of the operator's interest in the property. Annual costs and revenues are estimated for the mine over a reasonable life, given realistic assumptions regarding mine plans, markets, etc. The revenues, less operating costs, capital expenditures, and taxes, are the net cash flow from the property which, when discounted to present dollars at an appropriate rate, yields the amount a willing buyer would pay for the right to mine and sell the coal from the subject reserves.

Similarly, the Income Approach is also a method of valuation of an owned coal reserve based on the premise that a willing buyer purchases the lands under study for the value of the royalties that would be received per the lease.

The Income Approach is the logical and appropriate valuation methodology for the majority of the Blackjewel holdings; a prudent buyer would have used such an approach had the Blackjewel assets been sold in an orderly liquidation process rather than as a fire sale (a forced liquidation process). Similarly, if potential buyers were seeking financing, it is my experience that banks and/or other lenders would utilize the income approach as the foundation of their evaluation.

4.3 Typical Buyer Due Diligence

The term “due diligence” has a variety of definitions; in the context of a prospective buyer evaluating a potential acquisition, it is broadly described as “all appropriate inquiry to make an informed decision”. Analyses of supporting documentation and field investigation are the hallmarks of the due diligence process when assessing acquisition opportunities. The application of the Income Approach is the traditional and customary method used by mining entities, investors, and other industry professionals to determine the value of most coal and mineral properties.

An informed buyer will assemble a team of knowledgeable professionals (be they internal staff or third-party advisors) with specialty skills across a wide range of industry disciplines, including, but not limited to:

- Geology/Reserves.
- Mining Operations Assessment.
- Coal Processing/Material Handling.
- Environmental/Reclamation/Permitting.
- Financial Analysis.
- Markets and Transportation.
- Mining Plans/Projections.
- Property/Title.
- Human Resources.
- Safety/Compliance.
- Legal Matters.

These professionals evaluate the available documentation associated with the target asset, which often includes plans, projections, obligations, contractual positions, etc. The stage of development of various properties is directly related to associated risks, e.g., an undeveloped greenfield property has less predictability (greater risk) than a fully developed and operational mine with a history of operating performance. Such information is used to develop indicative value ranges for internal purposes. The valuation ranges are refined through site visits (enabling direct observations of operating practices, plant/equipment, geological conditions, etc.), meetings/discussions with key professionals representing the seller, and the preparation/development of alternative business plans and corresponding financial projections. Simultaneously, buyers are communicating and documenting progress with decision-makers, boards of directors, and lenders. This process may go through numerous iterations and corresponding negotiations with the seller (who may be conducting similar negotiations with other competing buyers) until a deal is agreed.

An orderly liquidation process—be it within or outside a restructuring—takes time. Additionally, if a seller is to maximize value, the transaction process must be marketed to likely purchaser entities, and the seller must be responsive to the requests of the buyers. This did not happen in the Blackjewel matter:

- The absence of key employees and professionals precluded the ability of Blackjewel (or its advisors) to be responsive to even the most basic questions and requests.
- While it is my understanding that several site visits were conducted by prospective buyers of Blackjewel's assets, the ability to observe mining operations and facilities was significantly constrained compared to typical site visitation programs that would be offered in an orderly liquidation process. Buyers were unable to meaningfully observe, evaluate, and otherwise assess the physical assets being sold. This is of particular importance as it pertains to field visits at underground mining operations, as sellers were unable to conduct typical multi-day tours at active mines. Such visits are critical elements during a potential acquisition as it gives the potential buyers the opportunity to assess the integrity of the mine infrastructure, mining conditions, and operating practices. Given that Blackjewel was unable to offer such tours to potential buyers, the subject buyers were truly "buying a pig in a poke".
- The rapid timetable, coupled with the minimized access to the sites, eliminated an unknown, but material, number of potential buyers. As previously discussed, many established mining entities would have avoided the bidding process, knowing that it would not be possible to perform requisite due diligence, procure Board approval, or obtain financing. While entities with neighboring properties or prior familiarity may have had some level of confidence in their knowledge of the subject sites, the majority of potential strategic buyers would simply avoid the process, thereby minimizing competition among remaining buyers for the assets. While potential bidders must adhere to confidentiality agreement and non-disclosure agreements, there is considerable general industry knowledge of business activity across and within the coal sector; thus, informed buyers tend to have an awareness of the levels of competition during a bidding process. Accordingly, when the competition is limited and the seller must sell, those who do bid have little reason to offer fair value when bidding on specific assets.

Based on my industry experience, constraints in the due diligence process (limited time, the absence of up-to-date financial statements, minimal site access, etc.) raise questions regarding the integrity, capability, and—ultimately—the future financial performance of coal properties. When evaluating a property amidst such constraints, such as the rapid forced liquidation process that occurred in Blackjewel, potential buyers have little certainty in future outcomes.

As previously described, BOYD is routinely engaged by prospective buyers and lenders in coal acquisitions. The timing and performance of such an assessment varies from project to project, but, during an orderly liquidation process, there are typical steps that

are followed, and general timing tends to range from perhaps 6 to 12 weeks, as summarized below:

- Prospective buyers, upon being contacted regarding the opportunity at hand, must first determine if there is internal interest and, if so, whether there is sufficient budget to mobilize and assess the project. When a potential buyer wishes to move forward, it is common for BOYD to be contacted by the prospective buyer a week after they have been notified by the seller.
- The process of engagement of a consultant includes submission of proposals, conflict checks, assembly of a team (assuming personnel with the requisite skills are available), and execution of an agreement; it is reasonable to allow one week for this component.
- The next steps are comprised of data collection, mobilization, and site visits, which adds a third week to the process.
- The assessment of reserves, plans, projections, and report assembly generally takes place over the subsequent three to eight weeks, depending on technical, operational, business, and strategic considerations. Among the tasks performed would be analysis of the target entity's business plans, preparation of alternative outcomes (based on the geology, reserves, site observations, market considerations, etc.) and assembly of various optimization/valuation cases.

The due diligence process is not limited to a 90-day duration as is common in orderly liquidations in bankruptcy situations. Privately negotiated sales/acquisitions can take place over an extended period of weeks and months, depending on the nature of the potential transaction, the complexity of the project, negotiations, financing, etc.

From a practical perspective, it is a rare event for a consultant such as BOYD to be engaged by a buyer or lender in a rapid forced liquidation process that is comparable to the Blackjewel process. This stands to reason, as informed buyers generally recognize the challenges of such a two-week study: there are numerous constraints on the ability to perform a thorough, engineered assessment. Therefore, when such engagements do occur, the client would be clearly informed that a consultant's work and conclusions would be limited to broad value ranges based largely on general industry insight and professional judgment rather than engineered analysis. The opinions offered would be on a highly qualified basis with significant disclaimers due to the inability to assess the project in a manner that is consistent with customary and traditional industry norms. The upper end of any value range offered would be based on outcomes that broadly mimic historical production and cost performance; conversely, the lower end of the value range would reflect any number of possible shortcomings in performance, deterioration in mining/geological conditions, potential need for investment, etc. Given the number of

unknowns in a situation such as the Blackjewel forced liquidation auction process, I (and other industry consultants) would advise clients to bid at the low end of the range (limiting such bids to perhaps 10% to 30% of the upper end of the value range).

It is my opinion that the bidders for the Blackjewel assets followed a limited evaluation process that broadly parallels this constrained approach. Accordingly, it is my opinion that, in an orderly liquidation process (one with additional time, information availability, site access, competitive environment, etc.), buyers would have: (1) had the ability to better resolve questions and assess future outcomes, and (2) would have raised their bids for specific assets of value given the greater degree of analysis performed (increased certainty) combined with the presence of other competitors in the process.

4.4 Blackjewel Information and FTI Summary

Table 4.1, following this text, is a listing of the individual eastern (CAPP) mining operations based on information provided by Blackjewel management as summarized by FTI (the “2018 Mine-by-Mine Pro Forma”). It depicts the individual mining operations and their associated earnings before interest, taxes, depreciation, depletion, and amortization (EBITDA) for 2018, the last full year of operations. Actual 2018 EBITDA for the combined sites was negative $89.1 million.

The Blackjewel properties are then adjusted for certain components such as ARO updates, general and administrative costs, related-party royalties, etc. This adds $5.6 million to the actual figure, resulting in an Adjusted EBITDA of negative $83.5 million for 2018.

Table 4.1 then illustrates the actual 2018 EBITDA figures for those Blackjewel operations that were sold during the bankruptcy process; this equates to negative $74.4 million. The application of adjustments adds $6.2 million to the actual figure, resulting in an Adjusted EBITDA of negative $68.2 million for the sold operations.

The market prices of coal products, like other commodities, move upwards and downwards based on supply and demand. Only a tiny percentage of US coal production is sold on the open (spot) market. The vast majority of US coal production is instead sold under contractual arrangements, with committed tonnage and price, over a defined period of time.

The coal market, especially for metallurgical coal products, had strengthened during 2018 to the extent that, by the beginning of 2019, the improved realizations for

Blackjewel's coal sales enabled operating activities to achieve positive EBITDA in the first quarter. The 2018 Mine-by-Mine Pro Forma included the application of actual realized pricing from the first quarter of 2019 (a blended average of Blackjewel's CAPP realizations for its metallurgical and thermal sales) to the actual 2018 tonnage produced by Blackjewel's sold CAPP assets. The $29.77/ton increase in selling price (from $67.93/ton average selling price in 2018 to $97.70/ton in the first quarter of 2019) would have resulted in considerable additional revenue. In effect, had the prices from the first quarter of 2019 been realized in 2018 while simultaneously achieving 2018's production levels and cost performance, the sold CAPP entities would have generated positive EBITDA of $8.3 million.

The 1Q2019 Mine-by-Mine Profit and Loss Statement complied by FTI presents detailed line-by-line costs on a mine-by-mine basis. This statement shows the combined actual EBITDA of the sold CAPP operations was positive in the first quarter of 2019 (about $0.9 million). The application of adjustments (again, components such as ARO updates, general and administrative costs, related-party royalties, etc.), the sold CAPP operations had positive EBITDA of more than $3 million in the quarter.

These positive outcomes indicate:

- A number of individual CAPP mines had positive economic value, as evidenced by the cash consideration actually paid and the liabilities assumed by numerous entities in their acquisitions of these properties.
- Since some mines were losing money, the actual cash generation by the better CAPP operations would have been stronger than the combined performance among all mines. In an orderly liquidation process and with DIP funding, it is reasonable and logical that Blackjewel would have generated cash during a three-month liquidation process by sustaining coal production activities from those mines that were generating cash. Meanwhile, Blackjewel would have taken the appropriate steps to minimize or avoid losses by idling/closing those operations that were losing money.

As described throughout this report, the buyers of mining properties utilize a variety of documents to evaluate target assets, including historical data; it is beneficial to know and understand what an operation has previously achieved, as this provides insight regarding operational capabilities. However, the valuations of mines and mining assets are ultimately based on what those assets are projected to do in the future. Accordingly, the Income Approach, which is the foundation of valuations for mining assets, is based on projections of future production, future costs, future revenues, and future capital expenditures, and not on past performance.

Without DIP financing, Blackjewel did not have personnel available to update their financial statements as of the end of the month (June 2019), which is also the end of the second quarter. Thus, current financial statements (similar to the 1Q2019 Mine-by-Mine Profit and Loss Statement) were not available to prospective bidders at the time they would have been invited to participate in the sale of the Blackjewel assets in July 2019. Similarly, the 2018 Mine-by-Mine Pro Forma was also not available at that time. However, using historical and current data is a reasonable starting point to provide indicative estimates of near-term future results; accordingly, the 2018 Mine-by-Mine Pro Forma and the 1Q2019 Mine-by-Mine Profit and Loss Statement are the types of financial information that a prospective buyer would consider in formulating bids.

Following this text is Table 4.1: Blackjewel Eastern EBITDA Summary as Prepared by FTI.

TABLE 4.1

BLACKJEWEL EASTERN EBITDA SUMMARY
AS PREPARED BY FTI
Prepared For
SQUIRE PATTON BOGGS
By
John T. Boyd Company
Mining and Geological Consultants
August 2022

Division	Description	Division	Sale Status	Blackjewel East - Based on 2018 Audit Information						Pro Forma BJ East Results Assuming Q1 2019 Pricing	
				2018 EBITDA - All Locations			2018 EBITDA - Sale Locations			2018 EBITDA By Location	
				EBITDA	Adjustments *	Adjusted EBITDA	EBITDA	Adjustments *	Adjusted EBITDA	All	Sale
Northern											
S7	S7 - Pax	Northern	Yes	880,339	(2,862,340)	(1,982,001)	880,339	(2,862,340)	(1,982,001)	(500,010)	(500,010)
H2-S7	H2-S7 HWM	Northern	Yes	250,506	9,815	260,321	250,506	9,815	260,321	887,704	887,704
Virginia											
D15	D15 - Pioneer #1	Virginia	No	(586,531)	681	(585,850)	-	N/A	-	(585,850)	-
D16	D16 - Mavrick	Virginia	Yes	(3,944,690)	(7,297)	(3,951,987)	(3,944,690)	(7,297)	(3,951,987)	143,008	143,008
D17	D17 - Tiller #4	Virginia	Yes	(4,046,929)	(192,747)	(4,239,676)	(4,046,929)	(192,747)	(4,239,676)	2,296,908	2,296,908
D18	D18 - Tiller #5	Virginia	Yes	(5,053,439)	68,934	(4,984,505)	(5,053,439)	68,934	(4,984,505)	(31,629)	(31,629)
D19	D19 - Pioneer #2	Virginia	No	(180,062)	6,365	(173,698)	-	N/A	-	(173,698)	-
P11	P11 - Gardner	Virginia	Yes	36,505	(42,628)	(6,123)	36,505	(42,628)	(6,123)	(6,123)	(6,123)
P12	P12 - Flat Rock	Virginia	Yes	521,304	(45,231)	476,073	521,304	(45,231)	476,073	476,073	476,073
D20	Beehive #2	Virginia	No	(253,460)	(345,961)	(599,421)	-	N/A	-	(599,421)	-
S5	Black Jewell	Virginia	No	(2,878,034)	60,605	(2,817,429)	-	N/A	-	(2,817,429)	-
S8	Jones Fork	Virginia	No	2,093,686	(3,193,761)	(1,100,075)	-	N/A	-	(1,100,075)	-
T12	T12 - Raven Dock	Virginia	Yes	3,373	(9,332)	(5,959)	3,373	(9,332)	(5,959)	(5,959)	(5,959)
S32	S32 - Pine Creek	Virginia	No	(1,088,741)	520,348	(568,392)	-	N/A	-	(522,574)	-
Black Mountain / Lone Mountain											
D10	D10 - Dorchester	Black Mountain	No	(511,783)	41,789	(469,994)	-	N/A	-	(469,994)	-
D11	D11 - Panther	Black Mountain	Yes	(6,550,662)	359,149	(6,191,514)	(6,550,662)	359,149	(6,191,514)	(1,018,592)	(1,018,592)
D12	D12 - Kellioka	Black Mountain	Yes	(629,407)	(362,589)	(991,996)	(629,407)	(362,589)	(991,996)	(991,996)	(991,996)
D14	D14 - Stillhouse	Black Mountain	No	(666,632)	(262,436)	(929,068)	-	N/A	-	(929,068)	-
D28	D28 - Huff Creek	Black Mountain	Yes	(12,090,646)	307,685	(11,782,961)	(12,090,646)	307,685	(11,782,961)	(2,837,028)	(2,837,028)
D29	D29 - Darby Fork	Black Mountain	Yes	929,136	425,225	1,354,362	929,136	425,225	1,354,362	21,394,053	21,394,053
D30	D30 - Clover Fork	Black Mountain	Yes	(4,517,465)	274,470	(4,242,995)	(4,517,465)	274,470	(4,242,995)	3,169,085	3,169,085
D7	D7 - Osaka	Black Mountain	Yes	(9,501,048)	138,373	(9,362,675)	(9,501,048)	138,373	(9,362,675)	(4,681,004)	(4,681,004)
D8	D8 - Cloverlick	Black Mountain	Yes	(10,737,422)	13,259	(10,724,163)	(10,737,422)	13,259	(10,724,163)	(6,694,277)	(6,694,277)
P15	P15 - Lone Mountain	Black Mountain	Yes	1,889,542	-	1,889,542	1,889,542	-	1,889,542	1,889,542	1,889,542
P7	P7 - Pigeon Creek	Black Mountain	Yes	894,085	(195,415)	698,671	894,085	(195,415)	698,671	698,671	698,671
P8	P8 - Cave Branch	Black Mountain	Yes	13,389,201	2,703,028	16,092,229	13,389,201	2,703,028	16,092,229	16,092,229	16,092,229
S17	S17 - Cumberland River	Black Mountain	No	(7,547,757)	(16,135)	(7,563,892)	-	N/A	-	(6,196,120)	-
H3-S17	H3-S17 HWM	Black Mountain	No	5,295,767	186,900	5,482,667	-	N/A	-	7,835,647	-
H4-S17	H4-S17 HWM	Black Mountain	No	579,457	14,216	593,674	-	N/A	-	923,113	-
S29	S29 - Cave Branch	Black Mountain	No	(996,161)	694,230	(301,931)	-	N/A	-	(301,931)	-
D21	D21 - Tyree Branch	Black Mountain	Yes	(5,881,388)	(513,462)	(6,394,850)	(5,881,388)	(513,462)	(6,394,850)	(3,918,711)	(3,918,711)
D31	D31 - 6C Tunnel Belt	Black Mountain	Yes	(1,364,035)	-	(1,364,035)	(1,364,035)	-	(1,364,035)	(1,364,035)	(1,364,035)
D6	D6 - Conveyor	Black Mountain	Yes	(2,557,256)	(18,838)	(2,576,094)	(2,557,256)	(18,838)	(2,576,094)	(2,576,094)	(2,576,094)
D9	D9 - Northfork #6	Black Mountain	Yes	(7,022,362)	(543,234)	(7,565,597)	(7,022,362)	(543,234)	(7,565,597)	(5,230,938)	(5,230,938)

TABLE 4.1 - Continued

				Blackjewel East - Based on 2018 Audit Information						Pro Forma BJ East Results Assuming Q1 2019 Pricing	
				2018 EBITDA - All Locations			2018 EBITDA - Sale Locations			2018 EBITDA By Location	
Division	Description	Division	Sale Status	EBITDA	Adjustments *	Adjusted EBITDA	EBITDA	Adjustments *	Adjusted EBITDA	All	Sale
BHL											
D1	D1 - Garmeada	BHL	No	(2,832,108)	(36,139)	(2,868,247)	-	N/A	-	(2,868,247)	-
D2	D2 - Beech Fork	BHL	Yes	(5,660,375)	176,479	(5,483,896)	(5,660,375)	176,479	(5,483,896)	(1,738,532)	(1,738,532)
D4	D4 - Jellico	BHL	No	(175,427)	(6,569)	(181,996)	-	N/A	-	(181,996)	-
D5	D5 - Path Fork	BHL	No	(386,295)	(122,060)	(508,355)	-	N/A	-	(508,355)	-
P6	Foresters Creek	BHL	No	(226)	-	(226)	-	N/A	-	(226)	-
P9	Straight Creek	BHL	Yes	3,418,744	49,835	3,468,579	3,418,744	49,835	3,468,579	3,468,579	3,468,579
P3	P3 - Hignite	BHL	No	725,566	(873,267)	(147,701)	-	N/A	-	(147,701)	-
P4	P4 - Beech Fork	BHL	Yes	345,158	(239,611)	105,547	345,158	(239,611)	105,547	105,547	105,547
S25	S25-Forester Spur	BHL	No	(26,336)	-	(26,336)	-	N/A	-	(26,336)	-
S28	S28 - Lewis Creek	BHL	No	(6,389,997)	2,628,777	(3,761,220)	-	N/A	-	(3,761,220)	-
H1-S28	H1-S28 HWM	BHL	No	1,307,787	57,437	1,365,224	-	N/A	-	1,365,224	-
T9	T9 - Clover	BHL	Yes	(282,472)	46	(282,426)	(282,472)	46	(282,426)	(282,426)	(282,426)
Other											
PC-Purcha	PC-Purchased Coal	N/A	No	(137,541)	-	(137,541)	-	N/A	-	(137,541)	-
T0	T0-Transfer	N/A	Yes	(8,024,095)	580,142	(7,443,953)	(8,024,095)	580,142	(7,443,953)	(7,443,953)	(7,443,953)
G1	G1 - G&A	SG&A	Yes	(9,096,303)	6,131,481	(2,964,821)	(9,096,303)	6,131,481	(2,964,821)	(2,964,821)	(2,964,821)
				(89,056,926)	5,560,216	(83,496,710)	(74,402,099)	6,205,196	(68,196,902)	(2,868,524)	8,335,272

Note: Adjustments related to noncash items (ARO updates, equity investment impact, etc.) in addition of overhead adjsutemnts and related party royalties as per FTI.

5.0 ORDERLY LIQUIDATION VALUATION

5.1 Steps to Value Blackjewel in an Orderly Liquidation

As previously noted, typical orderly liquidations of coal-related assets in bankruptcies have been conducted via auctions that ordinarily take place about 90 days after the initial filing. The Blackjewel auction, due to the lack of liquidity, took place just one month after the initial filing; the forced liquidation process was a fire sale and not an orderly liquidation process. Accordingly, it is my opinion that the steps taken by prospective buyers, the liquidation process, and the eventual results of the Blackjewel asset sales would have been significantly different had DIP financing been made available.

Based on my experience and involvement with due diligence and coal industry transactions, it is my opinion that the following principal actions and outcomes would have taken place in the Blackjewel asset sales process but for the withholding of DIP financing.

5.1.1 Cash Generation During the Orderly Liquidation Process

With liquidity from a DIP loan, Blackjewel would have had the reasonable expectation of being able to meet payroll obligations. Therefore, Blackjewel would have operated in a manner that maximized cash flow and value. Mines and facilities with the ability to generate cash would have continued to operate (particularly given the protections afforded by the bankruptcy code), while mining operations that were losing money would have been promptly idled. Salaried and hourly employees needed to manage the business and operate mines, rather than immediately being sent home, would have been retained if DIP financing was in place.

The annualized cash generation potential for the sold CAPP mines, per the 2018 Mine-by-Mine Pro Forma at 1Q2019 pricing, equated to about $8 million, or $2 million per quarter. Similarly, the 1Q2019 Mine-by-Mine Profit and Loss Statement illustrates that the sold CAPP mines generated about $3 million in the quarter on an adjusted basis. This equates to about $1 million in positive EBITDA per month, before considering the potential to minimize certain costs or defer certain payments per the bankruptcy code. Therefore, assuming no further cash savings are achieved, the better CAPP mines could have generated approximately $2 million to $3 million during a 90-day orderly liquidation process.

The CAPP mines that were sold were producing at a pace of approximately 3 million tons annually (0.75 million tons per quarter). Per the 1Q2019 Mine-by-Mine Profit and Loss Statement, the combined cost of consumables, parts/repairs, maintenance, and outside services was about $23 million, which equates to about $30 per ton (a figure, based on my industry experience, that is broadly comparable to other regional mining operations for these cost categories). There would have been opportunity to minimize or defer certain of these expenses within the duration of a typical 90-day orderly liquidation process.

In summary, had an orderly liquidation been conducted, the cash-positive CAPP mines could have contributed at least $3 million.

5.1.2 Compilation of Pertinent Data

Simultaneously, Blackjewel would have had the opportunity to assemble typical documentation upon which a buyer would expect to rely in an orderly liquidation. This would include the routine completion of operational and financial statements as of the end of June (monthly, quarterly, and year-to-date), including production reports (by mine and division), sales reports (including contractual positions), income statements, cash flow statements, etc. Up-to-date surveys and corresponding progress maps of mining operations would have been prepared in the ordinary course of business. In the actual forced liquidation of Blackjewel in 2019, documents of these types could not be prepared or provided, and therefore were not available to prospective buyers. It is my experience that the absence of recent historical operational and financial data is a red flag that contributes to uncertainty on the part of a potential bidder and would suppress bid prices. In an orderly liquidation process, the availability of customary documentation and data would have enhanced the confidence of potential bidders regarding the recent performance of the individual assets.

5.1.3 Notification of Potential Bidders

The next step in a liquidation process is the notification of a diverse mix of potential buyers. When this was done in 2019, the potential bidders were informed of the constraints associated with the rapid liquidation process (time limitations, lack of data, inability to conduct meaningful site visits, etc.). With only about two weeks from notification to auction, potential bidders were aware of the significant challenges that would compromise their efforts to assess the strengths and weaknesses of the investment opportunities, evaluate financial outcomes, seek executive and/or board approval, and procure financing. This minimized competition and did not maximize asset values. Had liquidity been made available, Blackjewel could have instead embarked upon an orderly liquidation process; potential buyers would have been informed that the

time frames, personnel availability, site access, and documentation were consistent with the ordinary approach to due diligence discussed in the “Typical Buyer Due Diligence” section of this report.

5.1.4 Bidder Due Diligence

Adequate DIP financing would have resulted in a situation where potential bidders received documentation as ordinarily provided in an orderly liquidation process, conducted site visits with informed Blackjewel escorts at the individual asset sites, thereby enabling them to perform income analyses that supported competitive valuation and bidding strategies. Potential bidders would have had reasonable opportunity to perform financial sensitivity analyses, develop supported value estimates, assess the competitive bidding landscape, seek owner/board approval, and pursue financing options. Such key components of a potential purchase were precluded in 2019 due to the lack of DIP financing and the resulting forced liquidation process.

5.2 Indicative Values if DIP Financing had Been Provided

I performed analysis to demonstrate how the transaction amounts would have been determined by the successful buyers, and what additional value, to a reasonable degree of certainty, would have been achieved in an ordinary liquidation process.

5.2.1 Kopper Glo Transaction

As summarized in the “Asset Sales” section of this report, the 2019 Kopper Glo transaction equated to $54.72 million in total consideration, comprised of $6.8 million in cash, $9.52 million in “royalties”, and the assumption of $38.4 million in ARO. Had the debtors been able to conduct an orderly liquidation process, they could have presented additional diligence information to potential bidders, including forward-looking projections and technical/geological data. Coal reserve estimates previously prepared for Ark Land Company (a subsidiary of Arch Coal Inc., the prior owner of the Lone Mountain assets acquired by Kopper Glo) showed the Lone Mountain assets had approximately 10.2 million tons of reserves as of the end of 2015. While it is reasonable that, as of 2019, a buyer would have anticipated sufficient coal reserves to operate the mines for an extended number of years, I took a conservative approach and assumed the key mines (Huff Creek and Darby Fork) would have a mine life through 2025.

I reviewed the financial information subsequently assembled by Blackjewel’s management and compiled by FTI regarding the potential future performance of the assets purchased by Kopper Glo. The 2018 Mine-by-Mine Pro Forma assumed the 2018 output (tons produced) was sustained in 2019, as were unit operating costs ($/ton

basis). EBITDA figures were then adjusted for non-cash components (ARO), certain overhead charges, and related party transactions. Blackjewel's average selling price for CAPP coal (the blended average of its metallurgical and thermal products) rose from $67.93/ton in 2018 to $97.70/ton in the first quarter of 2019 (1Q19), an increase of $29.77/ton. Applying the actual 1Q19 Blackjewel average CAPP price to these adjusted figures provides an indication of 2019 cash generation potential. Most of the principal assets acquired by Kopper Glo are summarized below:

Acquired Assets		2018 Actual			2018 Adjusted			Indicative 2019	
ID	Operation	EBITDA	Adjustments	EBITDA Adjusted	EBITDA	Adjustments	EBITDA Adjusted	All Locations	Sale Locations
D10	D10 - Dorchester	(511,783)	41,789	(469,994)	-	N/A	-	(469,994)	-
D11	D11 - Panther	(6,550,662)	359,149	(6,191,514)	(6,550,662)	359,149	(6,191,514)	(1,018,592)	(1,018,592)
D12	D12 - Kellioka	(629,407)	(362,589)	(991,996)	(629,407)	(362,589)	(991,996)	(991,996)	(991,996)
D14	D14 - Stillhouse	(666,632)	(262,436)	(929,068)	-	N/A	-	(929,068)	-
D28	D28 - Huff Creek	(12,090,646)	307,685	(11,782,961)	(12,090,646)	307,685	(11,782,961)	(2,837,028)	(2,837,028)
D29	D29 - Darby Fork	929,136	425,225	1,354,362	929,136	425,225	1,354,362	21,394,053	21,394,053
D30	D30 - Clover Fork	(4,517,465)	274,470	(4,242,995)	(4,517,465)	274,470	(4,242,995)	3,169,085	3,169,085
D7	D7 - Osaka	(9,501,048)	138,373	(9,362,675)	(9,501,048)	138,373	(9,362,675)	(4,681,004)	(4,681,004)
D8	D8 - Cloverlick	(10,737,422)	13,259	(10,724,163)	(10,737,422)	13,259	(10,724,163)	(6,694,277)	(6,694,277)
P7	P7 - Pigeon Creek	894,085	(195,415)	698,671	894,085	(195,415)	698,671	698,671	698,671
P8	P8 - Cave Branch	13,389,201	2,703,028	16,092,229	13,389,201	2,703,028	16,092,229	16,092,229	16,092,229
Total - Kopper Glo		(29,992,642)	3,442,537	(26,550,105)	(28,814,227)	3,663,184	(25,151,043)	23,732,079	25,131,141

The indicative 2019 EBITDA of $25.13 million could then be applied over the period from 2019 (modified to represent the last four months of the year) through the end of 2025 (assuming reserve depletion). The annual EBITDA estimate is discounted at 15%, which represents what a buyer would typically use when evaluating cash flow from an established coal mine based on my valuation and due diligence experience. The pre-tax DCF-NPV as of September 1, 2019, is $105.5 million as summarized below:

	$000						
	4 mos 2019	2020	2021	2022	2023	2024	2025
Estimated EBITDA	8,377	25,131	25,131	25,131	25,131	25,131	25,131
DCF-NPV at 15%	8,184	22,368	19,451	16,914	14,707	12,789	11,121
Cumulative DCF-NPV	8,184	30,552	50,003	66,917	81,624	94,413	105,534

I would have then advised a bidder to deduct the estimated ARO of $38.4 million from the total estimated value of $105.5 million, resulting in net present value of $67.1 million. Given the level of uncertainty associated with the actual forced liquidation process, I would then recommend a bid of 10% to 30% of the $67 million value. This would indicate a cash component of about $6.7 million to $20.1 million in addition to the assumption of liabilities. The actual cash component of $16.3 million (the actual combined cash and royalty per the successful Kopper Glo bid) fits within this range. It is noteworthy that this actual cash component figure is less than a single year of the EBITDA estimate used to calculate the value of the transaction.

I have personally visited several of these subject mines and the associated coal processing plant in conjunction with prior assignments over the years. However, as of the summer of 2019, I did not know (as Kopper Glo and others likely did not know) the operational and financial details of the subject operations. Additionally, the lack of DIP financing precluded the ability to conduct appropriate due diligence as of July 2019. While it is not possible to accurately determine the cash flow outcomes for these assets as of mid-2019, it is my opinion that no reasonable bidder—given the lack of competitors combined with the limitations of the process—would have made any offer other than a bid that is heavily discounted below the estimated value (as did Kopper Glo). Similarly, alternative approaches based on proper analysis would have yielded indicative valuations (after ARO have been deducted) where even the lowest end of these ranges materially surpassed the cash component of the Kopper Glo bid.

In an orderly liquidation process, which would have enabled a more thorough assessment of the assets, I assumed that the DCF-NPV broadly equated to the value of about $67 million after ARO. A bid of 40% to 60% of the calculated value ($27 million to $40 million) would materially increase the total cash component relative to what was actually obtained in the rapid forced liquidation (approximately $11 million to $14 million greater than the $16.3 million cash/royalty consideration). In a competitive bidding situation, bids discounted to this level would be unlikely to prevail; it is more typical for bids to be in the general range of perhaps 70% to 90% of the estimated value. It is reasonable that a knowledgeable buyer, with appropriate time to assess the operation and recognizing the competitive situation, would make a cash offer that equates to 75% of the $67 million after ARO, which equates to $50 million (approximately $34 million greater than the $16.3 million cash/royalty consideration). In order to offer a conservative opinion, I did not use the higher but logical value outcomes that would have been achieved with longer mine lives, increased metallurgical sales, or the upper range of value calculations.

It is my opinion that the likely consideration for this transaction in an orderly liquidation process would have been $11 million to $34 million higher than what was achieved in the rapid forced liquidation process that occurred.

5.2.2 Rhino Transaction

As summarized in the “Asset Sales” section of this report, the 2019 Rhino transaction equated to $7.13 million in total consideration, comprised of $0.85 million in cash, $0.21 million in “royalties”, and the assumption of $6.07 million in ARO. Had the debtors been able to conduct an orderly liquidation process, they could have presented additional diligence information to potential bidders, including forward-looking projections

and technical/geological data. Per the 2019 10-K Report filed with the Security and Exchange Commission by Rhino, the subject site (described as Jewell Valley) had 52.6 million tons of metallurgical coal, sufficient to operate the site for decades at or above recent historical production norms (in the range of 0.5 million tons annually).

I reviewed the financial information subsequently assembled by Blackjewel's management and compiled by FTI regarding the potential future performance of the assets purchased by the Rhino. The 2018 Mine-by-Mine Pro Forma assumed the 2018 output (tons produced) was sustained in 2019, as were unit operating costs ($/ton basis). EBITDA figures were then adjusted for non-cash components (ARO), certain overhead charges, and related party transactions. Blackjewel's average selling price for CAPP coal (the blended average of its metallurgical and thermal products) rose from $67.93/ton in 2018 to $97.70/ton in the first quarter of 2019 (1Q19), an increase of $29.77/ton. Applying the actual 1Q19 Blackjewel average CAPP price to these adjusted figures provides an indication of 2019 cash generation potential. Most of the principal assets acquired by Rhino are summarized below:

Acquired Assets		2018 Actual			2018 Adjusted			Indicative 2019	
ID	Operation	EBITDA	Adjustments	EBITDA Adjusted	EBITDA	Adjustments	EBITDA Adjusted	All Locations	Sale Locations
D16	D16 - Mavrick	(3,944,690)	(7,297)	(3,951,987)	(3,944,690)	(7,297)	(3,951,987)	143,008	143,008
D17	D17 - Tiller #4	(4,046,929)	(192,747)	(4,239,676)	(4,046,929)	(192,747)	(4,239,676)	2,296,908	2,296,908
D18	D18 - Tiller #5	(5,053,439)	68,934	(4,984,505)	(5,053,439)	68,934	(4,984,505)	(31,629)	(31,629)
P11	P11 - Gardner	36,505	(42,628)	(6,123)	36,505	(42,628)	(6,123)	(6,123)	(6,123)
P12	P12 - Flat Rock	521,304	(45,231)	476,073	521,304	(45,231)	476,073	476,073	476,073
T12	T12 - Raven Dock	3,373	(9,332)	(5,959)	3,373	(9,332)	(5,959)	(5,959)	(5,959)
Total - Rhino		(12,483,876)	(228,301)	(12,712,177)	(12,483,876)	(228,301)	(12,712,177)	2,872,278	2,872,278

The indicative 2019 EBITDA of $2.87 million reflects a blend of thermal and metallurgical coal products. The coal seams and mines throughout the Jewell Valley region are regarded as challenging (thin seams, difficult conditions); this has historically been offset by premium metallurgical characteristics enabling coal products to command solid pricing in the marketplace. This is based on decades of local experience at the various mine sites, notably those operated by prior owners (Jewell Smokeless and Suncoke). Applying more reasonable metallurgical coal prices would raise the annual estimated EBITDA figure by millions of dollars and would raise the DCF-NPV by tens of millions of dollars.

In order to present a conservative case, I adhered to the pricing per the blended 2019 first quarter results at Blackjewel.

The $2.87 million EBITDA figure was applied over the period from 2019 (modified to represent the last four months of the year) through the end of 2029 (thereby resulting in a decade of output, which is conservative based on reserve estimates). The annual

EBITDA estimate is discounted at 15%, which represents what a buyer would typically use when evaluating cash flow from an established coal mine based on my valuation and due diligence experience. The pre-tax DCF-NPV as of September 1, 2019, is $15.7 million as summarized below:

	$000										
	4 mos 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Estimated EBITDA	957	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870
DCF-NPV at 15%	935	2,554	2,221	1,932	1,680	1,461	1,270	1,104	960	835	726
Cumulative DCF-NPV	935	3,489	5,710	7,642	9,322	10,783	12,053	13,157	14,117	14,952	15,678

I would have then advised a bidder to deduct the estimated ARO of $6.1 million from the total estimated value of $15.7 million, resulting in a remaining value of $9.6 million. Given the level of uncertainty combined with minimal competition associated with the actual forced liquidation process, I would then recommend a bid of 10% to 30% of the remaining value. When using the conservative pricing of $97.70/ton, this would indicate a cash component of about $1.0 million to $2.9 million in addition to the assumption of liabilities. The actual cash component of $1.1 million (the actual combined cash and royalty per the successful Rhino bid) falls at the lower edge of this range. It is noteworthy that this actual cash component figure is less than a single year of the EBITDA estimate used to calculate the value of the transaction.

I am familiar with the subject assets based on various projects over my career. Given my knowledge of the site and the coal's market characteristics, it is likely that other informed bidders would have competed for the subject assets in an orderly liquidation process. The use of income analysis based on relatively small variations in production levels, cost estimates, and/or coal prices would result in meaningful swings in calculated values. For example, a 5% reduction in price would result in a negative calculated value; conversely, $5/ton increase in price would generate a calculated net present value (before ARO) approaching $40 million, equating to a +200% increase in calculated value. Accordingly, I would have expected a competitive bidding situation to result in bids equating to 50% to 90% of the calculated $9.6 million value based on this simplified 10-year cash flow projection.

It is also reasonable to assume that a potential buyer would assign some terminal value to the reserves. At a production pace of 0.5 million tons annually, there would be approximately 45 million tons remaining from Rhino's 2020 reserve estimate. Using a figure of about $0.05/ton for these unmined reserves equates to a terminal value of approximately $2 million. This is conservative estimate, as transactions for metallurgical

reserves in CAPP have varied significantly but have generally been in the range of $0.10/ton to several dollars per ton in recent years.

It is my opinion that the likely consideration for this transaction in an orderly liquidation process would have been $5.7 million to $9.5 million higher than achieved in the rapid liquidation process.

5.2.3 Black Mountain Transaction

As summarized in the "Asset Sales" section of this report, the 2019 Black Mountain transaction equated to $8.62 million in total consideration, comprised of $0.05 million in cash, $1.37 million in "royalties", a credit bid of $0.14 million, and the assumption of $7.07 million in ARO. Had the debtors been able to conduct an orderly liquidation process, they could have presented additional diligence information to potential bidders, including forward-looking projections and technical/geological data.

I reviewed the financial information subsequently assembled by Blackjewel's management and compiled by FTI regarding the potential future performance of the assets purchased by the Black Mountain. The 2018 Mine-by-Mine Pro Forma assumed the 2018 output (tons produced) was sustained in 2019, as were unit operating costs ($/ton basis). EBITDA figures were then adjusted for non-cash components (ARO), certain overhead charges, and related party transactions. Blackjewel's average selling price for CAPP coal (the blended average of its metallurgical and thermal products) rose from $67.93/ton in 2018 to $97.70/ton in the first quarter of 2019 (1Q19), an increase of $29.77/ton. Applying the actual 1Q19 Blackjewel average CAPP price to these adjusted figures provides an indication of 2019 cash generation potential. Most of the principal assets acquired by Black Mountain are summarized below:

Acquired Assets		2018 Actual			2018 Adjusted			Indicative 2019	
ID	Operation	EBITDA	Adjustments	EBITDA Adjusted	EBITDA	Adjustments	EBITDA Adjusted	All Locations	Sale Locations
D2	D2 - Beech Fork	(5,660,375)	176,479	(5,483,896)	(5,660,375)	176,479	(5,483,896)	(1,738,532)	(1,738,532)
P9	Straight Creek	3,418,744	49,835	3,468,579	3,418,744	49,835	3,468,579	3,468,579	3,468,579
P4	P4 - Beech Fork	345,158	(239,611)	105,547	345,158	(239,611)	105,547	105,547	105,547
T9	T9 - Clover	(282,472)	46	(282,426)	(282,472)	46	(282,426)	(282,426)	(282,426)
Total - Black Mountain		(2,178,945)	(13,250)	(2,192,195)	(2,178,945)	(13,250)	(2,192,195)	1,553,168	1,553,168

The indicative 2019 EBITDA of $1.55 million was applied over the period from 2019 (modified to represent the last four months of the year) through the end of 2029 (thereby assuming a 10-year life based on my industry experience). The annual EBITDA estimate is discounted at 15%, which represents what a buyer would typically use when evaluating cash flow from an established coal mine based on my valuation and due

diligence experience. The pre-tax DCF-NPV as of September 1, 2019, is $8.5 million as summarized below:

	$000										
	4 mos 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Estimated EBITDA	517	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550
DCF-NPV at 15%	505	1,380	1,200	1,043	907	789	686	596	519	451	392
Cumulative DCF-NPV	505	1,885	3,085	4,128	5,035	5,824	6,510	7,106	7,625	8,076	8,468

The DCF-NPV of $8.5 million would indicate that the $8.6 million consideration for the subject assets reflects a full price. Based on my personal experience at Beech Fork and Straight Creek, I evaluated an alternative outcome that assumes 0.5 million tons of output annually at a $7/ton cash margin; this level of performance would equate to $3.5 million in cash generation annually and a $19.1 million net present value, as follows:

	$000										
	4 mos 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Estimated EBITDA	1,167	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
DCF-NPV at 15%	1,140	3,115	2,709	2,356	2,048	1,781	1,549	1,347	1,171	1,018	886
Cumulative DCF-NPV	1,140	4,255	6,964	9,320	11,368	13,149	14,698	16,045	17,216	18,234	19,120

I then deducted the ARO of $7.1 million from the total estimated value of $19.1 million, resulting in a remaining value of $12.0 million.

Given the unknowns associated with the subject assets coupled with the lack of competition in the forced liquidation process, I would then recommend a bid of 10% to 30% of the remaining value, which would indicate a cash component of about $1.2 million to $3.6 million. The actual cash component of $1.4 million (the actual combined cash and royalty per the successful Black Mountain bid) falls at the lower edge of this range. It is noteworthy that this actual cash component figure is less than a single year of the EBITDA estimate used to calculate the value of the transaction.

In a competitive bidding situation in an orderly liquidation process, I would anticipate bids in the range of 40% to 60% of the $12 million value, which equates to total cash consideration of $4.8 million to $7.2 million.

It is my opinion that the likely consideration for this transaction in an orderly liquidation process would have been $3.4 million to $5.8 million higher than the $1.4 million achieved in the rapid liquidation process.

5.2.4 Coking Coal Transaction

As summarized in the “Asset Sales” section of this report, the 2019 Coking Coal transaction equated to $7.84 million in total consideration, comprised of $0.05 million in cash, $2.42 million in “royalties”, and the assumption of $5.37 million ARO. Had the debtors been able to conduct an orderly liquidation process, they could have presented additional diligence information to an increased number of potential bidders, thereby enhancing competition for the assets.

The assets acquired in this transaction were related to the Pardee complex, including associated permits and material handling facilities. Because the mining operations were idle, assessing cash flow generation opportunities as described in the Kopper Glo transaction is neither logical nor appropriate.

I have personally visited the Pardee complex a number of years ago. The consideration in the Coking Coal transaction is essentially the assumption of liabilities and deferred payments (royalties) in exchange for permits/facilities that were non-operational and thus represented a holding cost. The buyer of the Pardee assets (based in Australia) was represented by a local individual with general knowledge of the site.

The buyer has the ability to utilize the acquired assets and resume operational activities. However, this type of transaction is more closely aligned with coal industry transactions that, while largely speculative in nature, occur frequently:

- The buyer identifies a complex that has an established history as well as existing facilities and permits.
- While there are no sales to generate revenues and cash flow, the site is in non-operational status, and therefore holding costs are minimal.
- Site acquisition, in the virtual absence of competition, is of minimal cost: the assumption of ARO liabilities and a small, deferred cash payment stream (royalties).
- The buyer may attempt to operate some aspects of the site, or may provide services (coal loading, handling, etc.) in an effort to compensate for some or all of the holding costs.
- More likely, the buyer prepares a simplified series of plans/projections, assembles a “teaser”, and simply waits for a period of opportunity in the form of a coal price spike.
- When an unpredictable but inevitable market rebound eventually occurs, the buyer markets the site, seeking a quick sale to a motivated buyer during period of market exuberance. Such a rebound in coal pricing is indeed being experienced at present, with metallurgical coal products surpassing $500/ton earlier in 2022 and CAPP thermal prices reaching $200 ton in recent weeks—peaks that are unprecedented.

- The buyer flips the property to a strategic buyer, a diversified resource entity, or a financial buyer at a market peak. I have observed dozens of such transactions over the decades; it is not uncommon for a knowledgeable local entrepreneur to generate a gain that is orders of magnitude over the initial purchase price.

It is my opinion that the likely consideration for this transaction in an orderly liquidation process would have been higher simply as the result of increased competition. Had at least one other serious bidder emerged, it is reasonable that an additional $1 million to $2 million in consideration (cash, royalties, or a combination thereof) would have been achieved in an orderly liquidation process.

5.2.5 Contura East Transaction

As summarized in the “Asset Sales” section of this report, the 2019 Contura East (Pax) transaction equated to $12.59 million in total consideration, comprised of $6.15 million in cash and the assumption of $6.44 million ARO. Had the debtors been able to conduct an orderly liquidation process, they could have presented additional diligence information to an increased number of potential bidders, thereby enhancing competition for the assets.

Contura is a publicly traded producer of metallurgical coal and is among the largest producers in CAPP. Accordingly, Contura does not fit the logical form of a buyer of a CAPP asset in a rapid liquidation process. However, Contura’s acquisition is a logical outcome in this circumstance:

- Contura (and predecessor businesses) previously owned the site. Accordingly, Contura had unmatched knowledge of the mining operation, reserves, coal quality, etc.
- Further, Contura had contemporaneously been processing Pax coal at a Contura coal processing plant, and therefore had synergies (transportation, sales, etc.) that others did not.
- The purchase would be categorized as an opportunity rather than a risk.

In a forced liquidation process, Contura had little reason to pay a fair value for the site, whatever that figure may be. It is my opinion that Contura would have offered just a fraction of their estimated value of the targeted assets during a fire sale, and no more than half of the value. Therefore, the $12 million in total consideration indicates the acquired assets were likely worth no less than $24 million to Contura (and almost certainly more).

Conversely, in an orderly liquidation with competition from multiple potential buyers, Contura would have been motivated to increase its bid. it is my opinion that Contura

would have offered 50% more, effectively doubling their cash component from $6 million to $12 million (either in up-front cash or in royalties).

5.2.6 Eagle Specialty Materials Transaction

As summarized in the “Asset Sales” section of this report, the 2019 Eagle Specialty Materials transaction equated to $450.7 million in total consideration, comprised of $53.5 million in cash, the assumption of $326.5 million in ARO, and the assumption of $70.6 million in “other liabilities”. The transaction extended beyond the acquisition of two large, efficient PRB mines; the deal was complex, involving multiple entities, equipment leases, permits (and therefore ARO) that had not been transferred to Blackjewel, etc.

The forced liquidation process constrained the total consideration that was paid for the PRB assets/liabilities:

- The PRB mines were generating positive EBITDA as of 1Q2019: in excess of $10 million per quarter. Production volumes and cash operating expenses, like other PRB operations, were consistent and predictable. The cessation of operating activities deprived Blackjewel of the ability to continue generating cash during a typical 90-day orderly liquidation process.
- The value of the PRB operations was harmed by the lack of liquidity—without DIP funding, the two mines lost numerous supervisors, skilled tradesmen, and equipment operators. The value of an operating mine with a labor force is of greater value than an idled mine that is without its labor force.
- Given the relative disarray of the operational and financial arrangements of the PRB operations under the Blackjewel umbrella, the forced liquidation process prevented outside entities from participating in the auction. However, in an orderly liquidation process, the presence of other entities who could have placed bids for selective assets could have harmed Contura, who, given their position as being responsible for the ARO obligations, essentially funded the ESM transaction to escape the situation. With greater competition, it is my opinion that Contura would have been forced to contribute increased sums towards the transaction.

It is my opinion that $5 million to $10 million of additional consideration would have been achieved from the PRB operations had there been an orderly liquidation process.

6.0 SUMMARY OF OPINIONS

In my original report dated August 31, 2021, I opined that cash generation under an orderly liquidation process of Blackjewel's assets would have increased. As described herein, and in order to explain further the basis for my opinion, I provided additional evaluation, calculations, and analysis, and arrived at the following:

Additional Cash Consideration in an Orderly Liquidation Process

	$ Millions	
	Low	High
Cash Generation During Orderly Liquidition	3.0	3.0
Kopper Glo Transaction	11.0	34.0
Rhino Transaction	5.7	9.5
Black Mountain Transaction	3.4	5.8
Coking Coal Transaction	1.0	2.0
Contura East	6.0	6.0
ESM-PRB West	5.0	10.0
Total	35.1	70.3

If Blackjewel had received anticipated DIP financing and conducted an orderly liquidation process, it would have received consideration of between $35 million and $70 million more than what was realized in the fire sale process that occurred, before considering continued positive cash flow from PRB operations. This is principally measured by an implied income approach in a more typical diligence environment as described herein. This is generally consistent with my opinion in my original report that "the cash generation under an orderly liquidation process would have increased by $25.9 million to $53.7 million."

Blackjewel's sales process was a forced liquidation process that was worse than what is generally regarded as a fire sale. The mines were idled, and employees were sent home without notice. Such a forced liquidation process, which was the least favorable selling process that I have witnessed in my professional career, did not maximize the value of the sales. Instead, the manner in which the sales were conducted minimized the value received by the seller.

The forced liquidation process arose from the lack of liquidity. The contemplated DIP financing would have provided liquidity and a corresponding ability to enhance the auction process to the benefit of the bankruptcy estate.

It is indisputable that individual assets had value, as demonstrated by asset sales that generated $70.6 million in cash consideration during the abbreviated forced liquidation process. It is apparent that certain operators or investors were able to identify some level of opportunity on an asset-by-asset basis, despite the compromised selling process. This empirically demonstrated value would have been higher in an orderly liquidation process.

The entities who acquired the subject properties and operations are generally comprised of knowledgeable individuals with localized industry experience. Given BOYD's experience and industry knowledge, the successful buyers benefited from the actual selling process. They were able to acquire assets based on: (1) bidding low or "safe" amounts on properties where they had site-specific knowledge, and (2) the lack of competition. In effect, the buyers had no need to bid an amount that reflected a FMV or an OLV given the reduced number of potential suitors that ultimately resulted from Blackjewel's cash-starved financial position.

But for the lack of liquidity, Blackjewel would have been able to sustain mining operations and would have retained key employees. This, in turn, would have enabled a more robust auction process. A greater number of likely bidders would have participated, and those bidders would have had materially increased access to information, plans, site observations, etc. Likewise, the availability of liquidity would have enabled Blackjewel to continue to operate those mines that were generating free cash flow.

The sold Blackjewel assets were not regarded as premium operations; it was general industry knowledge that these were challenging and difficult properties previously owned by distressed entities (Arch, Alpha, etc.). Nevertheless, individual operations and assets would have commanded greater selling prices in an orderly liquidation process. It is my opinion that with the availability of liquidity, an orderly liquidation process would have resulted in increased competition, greater buyer knowledge, a more extended sales timeline, and opportunities to pursue financing. This would have afforded ample opportunity for multiple increased bids on and competitive negotiation for the sold assets.

APPENDIX A

List of Documents Provided or Relied Upon

1. 2018 Audited Financials – Blackjewel Holdings L.L.C. and Subsidiary (dated June 15, 2019)
2. 2018 Auditor Communications to Mgmt. with Attachments
3. FY 2018 Financial Statements
4. FY 2017 Financial Statements for Revelation Energy Holdings, LLC/Blackjewel Holdings, LLC and Subsidiaries
5. FY 2018 Consolidated Financial Statements for Revelation Energy Holdings, LLC/Blackjewel Holdings LLC and Subsidiaries
6. June 5, 2019 Statement of Weekly Financials for BJMS, BJE, and BJW
7. 2017 Audited Financial Statements – Blackjewel Holdings L.L.C. and Subsidiaries and Affiliates (dated Aug. 15, 2018)
8. Blackjewel – DM Jefferies Presentation.pdf
9. Blackjewel Financial Model.xlsx
10. 19.09.22. 1440 – BJ East Sales Summary.pdf
11. September 2019 Cash Flow Model.xlsx
12. Coal_Valuation_Template_v5.xlsx
13. December 6, 2018 Email from D. Tanner (Gaddy) to D. Kesler et al. re: FMV Report – Belle Ayr Surface Mine & Eagle Butte Surface Mine
14. (Summary Report) Gaddy Engineering Co. FMV of Operating Assets at Belle Ayr Surface Mine & Eagle Butte Surface Mine (Wyoming) as of 12/9/2017
15. Ex. A to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
16. Ex. B to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
17. Ex. C to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
18. Ex. D to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
19. Ex. E to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
20. Ex. F to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
21. Ex. G to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
22. Ex. H to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
23. Ex. I to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
24. Ex. J to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
25. Ex. K to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
26. Ex. L to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine

27. Errata to Plant & Equipment List attached to Gaddy Valuation of Belle Ayr Surface Mine & Eagle Butte Surface Mine
28. July 20, 2018 Email from D. Tanner (Gaddy) to J. Hoops et al. re: FMV Report – Lone Mountain Processing, Inc.
29. (Summary Report) Gaddy Engineering Co. FMV of Operating Assets at Lone Mountain Processing, Inc. as of Sept. 15, 2017
30. Ex. A to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
31. Ex. B to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
32. Ex. C to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
33. Ex. D to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
34. Ex. E to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
35. Ex. F to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
36. Ex. G to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
37. Ex. H to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
38. Ex. I to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
39. “Book B Contents” to Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
40. Cumberland River & Pardee Permit Information used by Gaddy for Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
41. Lone Mountain, Cumberland River, and Powell Mountain Permit Summary used by Gaddy for Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
42. Powell Mountain Permit Information used by Gaddy for Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
43. Powell Mountain Permit Summary used by Gaddy for Valuation of Assets at Lone Mountain Processing, Inc. in Harlan Cty, KY and Lee Cty., VA
44. Notice of di minimus asset sale to Jeffrey Hoops (Bankr. Dkt. No. 1717)
45. Notice of di minimus asset sale to Civil, LLC (Bankr. Dkt. No. 1841 and 2066)
46. Notice of di minimus asset sale to Bell Energy Partners, LLC (Bankr. Dkt. No. 1882)
47. Notice of di minimus asset sale to Keystone Properties, LLC (Bankr. Dkt. No. 1883)
48. Notice of di minimus asset sale to Alden Resources, LLC (Bankr. Dkt. No. 2211)

49. Notice of di minimus asset sale to David Osborne (Bankr. Dkt. No. 2216)
50. Notice of di minimus asset sale to 4th Gen. Fuels LLC (Bankr. Dkt. No. 2225)
51. Notice of di minimus asset sale to Nally & Hamilton, Inc. (Bankr. Dkt. No. 2251)
52. Notice of di minimus asset sale to Hydroponic Farms USA (Bankr. Dkt. No. 2536)
53. Notice of di minimus asset sale to KAMCO, LLC (Bankr. Dkt. No. 2549)
54. Notice of di minimus asset sale to KTRAC Machinery (Bankr. Dkt. No. 2560)
55. Notice of di minimus asset sale to ESM (Bankr. Dkt. No. 2601)
56. Notice of di minimus asset sale to CBD Resources, Inc. (Bankr. Dkt. No. 2941)
57. Index of the The Debtors' Aug. 1, 2019 Auction Data Room Folders Titled: Project Slate.zip; Expanded Project Slate.zip; Debtors & Debtors Advisors Only.zip
58. BJLLC_Sales Summary_06.18.21.xlsx
59. BJLLC – Royalty Schedule (2019.10.01).pdf
60. East Sales Summary_6.15.2021.pdf
61. ESM –Western Leases and Contracts 9019 Motion (Bankr. Dkt. No. 2965)
62. ESM Flow of Funds.pdf
63. Debtors' Motion for an Order Authorizing the Private Sale of Certani Assets to Black Mountain Resources, L.L.C. (Bankr. Dkt. No. 1146)
64. Order Authorizing The Private Sale of Certain Assets to Black Mountain Resources, L.L.C. (Bankr. Dkt. No. 1217)
65. Order Approving The Sale of Certain Assets to Coking Coal, LLC (Bankr. Dkt. No. 963)
66. Order Approving The Sale of Debtors' Purchased Assets (Bankr. Dkt. No. 964)
67. Order Approving The Sale of Certain Assets to Dean-McAfee Lenders (Bankr. Dkt. 1214)
68. Debtors' Emergency Motion to Transfer Certain Eastern Permits and Reclamation Obligations to an Affiliate of FM Coal, LLC (Bankr. Dkt. No. 1196)
69. Debtors' Motion For An Order Authorizing the Private Sale of the Western Assets to Eagle Specialty Materials, LLC (Bankr. Dkt. No. 1157)
70. Order Approving The Sale of Certain Assets to Eagle Specialty Materials, LLC (Bankr. Dkt. No. 1187)
71. Order Granting Debtors' Emergency Motion Pursuant to Section 363 of the Bankruptcy Code to Transfer Certain Eastern Permits and Reclamation Obligations to an Affiliate of FM Coal, LLC (Bankr. Dkt. No. 1219)
72. Order Approving The Sale of Certain Assets to Javelin Global Commodities (US) LP (Bankr. Dkt. No. 1218)
73. Order Approving The Sale of Certain Assets to John Deere Construction and Forestry Company (Bankr. Dkt. No. 666)
74. Order Approving The Sale of Certain Assets to Kopper Glo Mining, LLC (Bankr. Dkt. No. 1096)
75. Agreed Order Resolving Coking Coal, LLC's Objection (Bankr. Dkt. No. 1100)

76. Order Approving The Sale of Certain Assets to Mark Energy, LLC (Bankr. Dkt. No. 645)
77. Debtors' Motion For An Order Authorizing the Private Sale of a Highwall Miner to Monument Mining, Inc. (Bankr. Dkt. No. 1688)
78. Order Authorizing The Private Sale of a Highwall Miner to Monument Mining, Inc. (Bankr. Dkt. No. 1833)
79. Debtors' Motion For An Order Authorizing the Private Sale of Certain Assets to Ramaco Resources Land Holdings, LLC (Bankr. Dkt. No. 2174)
80. Order Authorizing The Private Sale of Certain Assets to Ramaco Resources Land Holdings, LLC (Bankr. Dkt. No. 2310)
81. Order Approving The Sale of Certain Assets to Rhino Energy, LLC (Bankr. Dkt. 916)
82. Order Approving The Sale of Certain Assets to Sulzer Electro Mechanical Services (US), Inc. (Bankr. Dkt. No. 919)
83. Order Approving The Sale of Certain Assets to Tye Fork Coal Company, Inc. (Bankr. Dkt. No. 920)
84. BJLLC_Sales Summary_06.18.21.xlsx
85. BJLLC_Permit Summary_06.21.21.xlsx
86. 2019-07-18 Bond List BlackJewel - Revelation permits.pdf
87. BJ_Revelation_Permits_Bonds.xlsx
88. First Surety Bonds.pdf
89. INIC Blackjewel Bond Listing.pdf
90. INIC Revelation Energy Bond Listing.pdf
91. WV DEP Jan 2019 Revelation & Keystone Industries Bond List (Blackjewel no WV Permits).xlsx
92. December 5, 2018 email from Jeffrey Hoops re October Financials and 2019 – 2023 Integrated Model
93. Debtors' Emergency Motion for an Order Authorizing Debtors to Obtain Interim Postpetition Financing from Riverstone Credit Partners (Bankr. Dkt. No. 47)
94. DIP Term Sheet (Bankr. Dkt. No. 47-1)
95. Proposed Order (Bankr. Dkt. No. 47-2)
96. Order re Bidding Procedures for Asset Sales (Bankr. Dkt. No. 356)
97. Debtors' Supplemental Emergency Motion to Obtain DIP Financing (Bankr. Dkt. No. 36)
98. July 2, 2019 Hearing Transcript on Debtors' Supplemental Emergency Motion to Obtain DIP Financing
99. The Debtors' Aug. 1, 2019 Auction Data Room Folders Titled: Project Slate.zip; Expanded Project Slate.zip; Debtors & Debtors Advisors Only.zip
100. 2018 Capital Budget – Underground Equipment BHL Complex.xlsx
101. Mine map.xlsx
102. Division Summary.pdf

103. Royalty Statement PAX – Boone East Development Co.xlsx
104. Royalty & Whellage Statement PAX – Cook.xlsx
105. Royalty Statement PAX – Meadow Creek Coal Corp.xlsx
106. Royalty Statement PAX – Robert Kosnoski.xlsx
107. Royalty Statement PAX – Lightning.xlsx
108. Royalty Statement PAX – Meadow Creek Coal Corp.xlsx
109. Royalty Statement PAX – Rowland land Company.xlsx
110. June Royalty Statement.xlsx
111. BJLT_Financial Document Index.xlsx
112. 680961.xlsx (Blackjewel forecasts through 2023)
113. 442728.xlsx (Blackjewel forecasts through 2024)
114. 441687.pdf (Sales Projection – Blackjewel East)
115. 436556.xlsx (Sales Report for Eagle Butte and Belle Ayr)
116. February 5, 2019 Email from C. Shupe to D. Kesler et al. re: CFSC Conference Call
117. December 5, 2018 Email from A. Smith to C. Shupe et al. re: FW: OCTOBER FINANCIALS AND 2019 – 2021 INTEGRATED FINANCIAL MODEL
118. March 25, 2019 Email from B. Barlow to J. Freund et al. re: 2019 Budget Model
119. 10. Final 2019 Budget Model-Blackjewel – Jefferies.xlsx
120. 9. Audit 2010 – 2017 Summary & 2018 -2021 Pro-forma.xlsx
121. December 5, 2018 Email from B. Berger to J. Hoops re: OCTOBER FINANCIALS AND 2019 – 2023 INTEGRATED FINANCIAL MODEL
122. January 2, 2019 Email from J. Hoops to J. Scofield et al. re: November Financial Results
123. April 25, 2019 Email from J. Hoops to J. Scofield et al. re: First Quarter 2019 Financial Results
124. July 3, 2019 Email from J. Hoops to jhoops4379@aol.com re: FW: First Quarter 2019 Financial Results
125. Current controller-operator 7.23.21.xlsx
126. June 30, 2019 Email from J. Hoops to D. Beckman et al. re: FW: 2nd Half of 2019
127. Complex Mine Loadout Relations -.xlsx
128. Complex Mine Loadout Relations 7.27.21.xlsx
129. Emergency DIP Motion (Bankr. Dkt. No. 12)
130. Blackjewel Cash Flow Backup (2019.06.30).xlsx
131. 19.07.05 Blackjewel DIP and Sale Process Agenda.pdf
132. 2. Blackjewel DM Jefferies Presentation.pdf
133. 4. Final 2019 Budget Model-Blackjewel.xlsx
134. Macquarie 2019 Budget Model-Blackjewel.xlsx

135. 4C. First Quarter 2019 Management Report.pdf
136. BJLT_Actual Key Metrics and Forecast Summary_08.13.21.xlsx
137. March 2019 BLACKJEWEL PL Combined.xlsx
138. July 6, 2017 Email from P. Prichart to FTI et al. re: EXTERNAL Blackjewel Contract Positions
139. BJLLC CF Actuals_08.17.2021.xlsx
140. BJLLC_West Cash Forcast_08.17.2021.xlsx
141. 2018 Mine by Mine Financials_Summarized 8.18.21 v7.xlsx
142. BJ Q1 2019 Mine by Mine P&L_08.18.2021_v2.xlsx
143. 2018 YTD Mine by Mine.xlsx
144. BJ 1.31.19.xlsx
145. BJ 2.28.18.xlsx
146. BJ 2019 Raw.xlsx
147. BJ 3.31.19.xlsx
148. Complex Mine Loadout Relations 7.27.21.xlsx
149. December Statements-BJW FINAL 6.5.19.xlsx
150. Feb. 11, 2019 Email from K. Nathwani to D. Kesler et al. re: January Month End Report
151. 20190103 Weekly Report_31Jan2019 Month EndV3.xlsx
152. Copy of 20190131 Weekly Report (Jan Sales Breakdown).xlsx
153. Sales 1-2019 (version 1).xls
154. Sales 1-2019.xls
155. 20190228 Weekly Report_28Feb2019_MonthEnd v3.xlsx
156. Feb Sales Sheet by loadout.xlsx
157. Sales 2-2019 JE Adj.xls
158. Sales 2-2019.xls
159. 20180331 Weekly Report_31Mar2018_vF2.xlsx
160. March Cash Receipts.xlsx
161. April 18, 2018 Email from J. Haas to D. Kesler et al. re: March Month End Report
162. Sales 3-2018.xls
163. 20180501 Weekly Report_30Apr2018_MonthEnd_v1 (version 1) – Modified Thermal Price.xlsx
164. 20180501 Weekly Report_30Apr2018_MonthEnd_v1 (version 1).xlsx
165. 20180501 Weekly Report_30Apr2018_MonthEnd_v1.xlsx
166. May 23, 2018 Email from J. Prince to D. Kesler re: P7 & P8 Price Schedule
167. May 23, 2018 Email from J. Prince to D. Kesler re: P7 & P8 Price Schedule (2)

168. Sales 4-2018.xls
169. 0180601 Weekly Report_31May2018_MonthEnd_F7.xlsx
170. Financial Statements – Updated Formatting – Updated 6.6.19.xlsx
171. Footnote Support-2018.xlsx
172. Sales 5-2018.xls
173. July 13, 2018 Email from T. Morris to D. Kesler et al. re: June Month End Sales
174. 20180630 Weekly Report_30Jun2018_MonthEnd_vF10.xlsx
175. Sales 6-2018.xlsx
176. Sales 6-2018 – Copy
177. Sales 6-2018 – Copy (2).xlsx
178. Sales 6-2018 – Copy (3).xlsx
179. Sales 6-2018 – Copy (4).xlsx
180. August 7, 2018 Email from J. Haas to J. Hoops et al. re: July Month End Report
181. 20180731 Weekly Report_31Jul2018_MonthEnd_vF7.xlsx
182. Sales 7-2018.xls
183. 20180831 Weekly Report_31Aug2018_MonthEnd_vF4.xlsx
184. Copy of 20180831 Weekly Report_31Aug2018_MonthEnd (Aug Sales).xlsx
185. Sales 8-2018.xls
186. Sales 8-2018 – Copy.xls
187. Sales 8-2018 – Copy (2).xls
188. 2018 Weekly Report_30Sept2018_MonthEnd_vF4.xlsx
189. Break Out 20180930 Weekly Report_30Sept2018_MonthEnd_vF4.xlsx
190. Sales 9-2018.xls
191. Sales 9-2018 – Copy.xls
192. Sales 9-2018 – Copy.xls
193. November 28, 2018 Email from T. Morris to D. Kesler et al. re: October Month End Report
194. November 28, 2018 Email from K. Nathwani to J. Hoops et al. re: October Month End Report
195. 20181031 Weekly Report_31Oct2018_MonthEnd_v4.xlsx
196. CSS Reconcile 10-21.pdf
197. October 20181031 Weekly Report_31Oct2018_MonthEnd_v4.xlsx
198. Sales 10-2018.xls
199. Sales 10-2018 - Copy.xls
200. Sales 10-2018 – Copy (2).xlsx
201. Sales 10-2018 – Copy (3).xlsx

202. 20181130 Weekly Report_30Nov2018_MonthEnd V5.xlsx
203. Copy of 20181130 Weekly Report November Sales.xlsx
204. Sales 11-2018.xls
205. Sales 11-2018 – Copy.xls
206. Sales 11-2019 – Copy (2).xls
207. BLJ1900500 3rd Party Sales (01-25-2019 19.05.46.013)_v1.pdf
208. 20181231 Weekly Report_31Dec2018 Month End_v3.xlsx
209. ~$20181231 Weekly Report_31Dec2018 Month End_v3.xlsx
210. Sales 12-2018.xls
211. BJLLC – Royalty Schedule (2019.10.01)
212. Mine Safety and Health Administration Form 7000-2
213. Table 3, Arch Coal Inc. Coal Holdings, Total Recoverable Reserves and Resources (Document 7-158683, Lone Mountain and Powell Mountain)
214. Rhino Resource Partners LP 2019 10-K Report

John L. Weiss
Vice President

Summary of Expertise

Over four decades of progressive experience in management and evaluation of domestic and international mining operations. Project management of financial, strategic, and operational assessments of mines and mining companies, including valuations, appraisals, feasibility and economic analyses, competitor evaluations, market forecasts, and supply/demand analyses. Provided litigation support and expert witness testimony in numerous technical, operational, financial, safety, and other mining-related matters. Extensive experience in the analysis of business and strategic plans, and the corresponding development and implementation of practical solutions to enhance financial performance, maximize productivity, and improve operational efficiency.

Experience

1990 to Date – John T. Boyd Company, Mining and Geological Consultants.

- Provided technical and financial advisory services to the Secured Lenders of a distressed, major coal mining company over a two-year period. Acted as the liaison between the Lenders and Company representatives on technical and financial matters. Evaluated reserves, environmental issues, coal sales, mining plans, and financial projections. Provided proactive recommendations and strategic advice to the Lenders and their legal advisors so as to maximize value of the Lenders' interests. Monitored all aspects of the Company's mining and financial activities on an ongoing basis. Actively engaged in negotiations and drafting of restructuring documents. Post-closing activities included bankruptcy analyses and valuations of the Company and its individual business divisions.
- Performed comprehensive assessments and analyzed operational, financial, and strategic aspects of a diverse mix of mines and mining companies throughout the United States and internationally. Broad exposure to a wide range of mining operations enables rapid determination of the potential to enhance performance and development of practical approaches to achieve targets. Developed new strategic plans and mine designs, improved sales/marketing efforts, and provided assistance in the implementation of alternative operational and production schedules to improve productivity, reduce operating costs, and enhance value at a variety of underground and surface mining operations.
- Conducted due diligence reviews and valuations of US and international mines and mining companies. Assessed practical aspects of underground and surface mining operations and processing facilities, evaluated reserves and liabilities, and analyzed future business plans and sales projections. Developed independent production plans, financial projections, and cash flows and performed sensitivity analysis to establish ranges of values. Reporting requirements ranged from general evaluations within compressed time frames to extended assessments combined with detailed sensitivity analysis of production and financial projections.
- Prepared numerous competitor evaluations, regional supply and demand studies, and market forecasts for a variety of coal producers, coal consumers, and financial institutions. Used internal knowledge of coal reserves and mine operations to establish realistic "bottom-up" supply curves and derive corresponding coal price forecasts.

Experience - Continued

- Completed a comprehensive assessment of British Coal Corporation relative to productivity potential, economic viability, and privatization over a three-year period. Project manager of a 15- to 20-person technical staff that performed detailed evaluations of mining operations, reserves, and markets. Prepared mining plans and projections for 51 underground mines and dozens of active and proposed surface mines. Extensive interaction with senior government officials, legal and financial advisors, and national news media. Testified before a Select Committee of the British House of Commons.
- Developed operational recommendations that enabled significant improvements in productivity, costs, and efficiency at a variety of US and international mining operations. Supervised industrial engineering analyses and detailed practical evaluations of production activities, and defined benchmarks relative to industry's best practices. Established operating and accountability standards for production, maintenance, outby, and managerial functions. Conducted review meetings with corporate and senior level mine management, and held training sessions for frontline supervisors and hourly workers.
- Evaluated the effects of governmental impositions on mines and mining companies. Prepared technical and financial analyses to determine the changes in cost structure, production levels, and mining plans resulting from the implementation of the MINER Act and changes in enforcement procedures associated with previously existing regulations. Assessments were performed for producers and utilities, and ranged from overviews of general industry trends to detailed analyses.
- Provided legal counsel with litigation support and expert witness testimony. Case topics included valuations, mineability and merchantability of reserves, mining operations, product liability associated with operation of underground mining equipment, safety aspects, fatalities and serious injuries, mine planning, and coal supply agreements.

1985 to 1990 – Consolidation Coal Company, Dilworth and Bailey Mines, Pennsylvania.

- Underground Foreman – Supervised longwall mining operations and maintenance activities, including the installation and recovery of longwall faces. Directed continuous miner sections using full-face miners equipped with satellite bolters, and managed a variety of construction and outby projects.
- Safety Inspector – Conducted detailed inspections of underground mine, surface facilities, and preparation plant. Enforced federal and state regulations, ventilation and roof control plans, and company policies. Extensive interaction with MSHA personnel, including escorting inspectors, attending violation conferences, and providing testimony in litigation case. Participated in accident investigations and employee health and safety programs. Monitored noise and respirable dust levels and maintained mine-wide compliance.
- Industrial Engineer – Performed time study and industrial engineering analysis of underground coal mining operations and equipment, including prototype machinery.

Experience - Continued

- Served as captain of Dilworth Mine Rescue Team—actively participated in fighting three major underground mine fires.

1983 – W.S. Frey Company, Virginia
Engineering Assistant / Surveyor.

1981 – MAPCO, Mettiki Coal Corporation, Maryland.
Underground General Laborer.

Foreign Consulting Experience

Australia, Canada, Czech Republic, Ethiopia, Germany, Japan, Poland, Republic of South Africa, Russia, Ukraine, United Kingdom

Education

1983 BS: Mining Engineering, Pennsylvania State University. Course work completed for M. Eng. in Mineral Engineering Management, Pennsylvania State University.

Short Course Instructor

Rocky Mountain Coal Mining Institute, June 2001: Enhancing Productivity at Underground Mining Operations.

Registration and Certificates

Registered Professional Engineer–Pennsylvania

Pennsylvania Mine Foreman Certification
MSHA Certified Training Instructor
MSHA Certified Dust Sampling
MSHA Certified Dust Calibration
MSHA Certified Noise Sampling

Recipient of SME's 1996 Woomer Award

Memberships

Registered Member – Society for Mining, Metallurgy, and Exploration, Inc.

Publications and Papers

1993 Independent Review: 10 Collieries Under Consultation, British Coal Corporation, ISBN 0-11-515329-2.

1993 Independent Analysis: 21 Closure Review Collieries, British Coal Corporation, ISBN 0-11-514990-2.

John L. Weiss - Vice President
Record of Expert Witness Testimony

Date(s) of Testimony	Body/Agency Testified Before	Subject of Testimony	Client/Law Firm
5/3/2022	Deposition U.S. District Court Western District of Kentucky Case No. 4:18-cv-38-JHM	Valuation methodology and valuation of a partial interest in Western Land Company, LLC.	Western Mineral Development, LLC, Ceralvo Holdings, LLC, and Thoroughbred Resources, L.P. Thompson Hine LLP
10/29/2021	Deposition U.S. Bankruptcy Court for the Southern District of West Virginia Case No. 19-30289	Valuation of and the cash consideration obtained during the forced liquidation of selected assets of the estates of Blackjewel L.L.C. and certain related entities	Blackjewel, L.L.C. et al Squire Patton Boggs
7/23/2021	Deposition Commonwealth of Kentucky Pike County Court C.A. No. 17CI-00437	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC
9/29/2020	Deposition Commonwealth of Kentucky Floyd County Circuit Court C.A. No. 14-CI-613	1. Diminution in the value of coal reserves resulting from an appropriation by the Floyd County Board of Education.	Elk Horn Coal Company Sever Storey
9/25/2020	Deposition U.S. District Court for the Southern District of Illinois Case No. 3:19-CV-00802-SMY-GCS	1. Source of coal mine methane extracted from underground voids of an abandoned coal mine.	Keyrock Energy, LLC Dentons
7/29/2020	Deposition Circuit Court of Marshall County, West Virginia C.A. No. 15-C-169	1. Cause of fatal accident on a longwall face in an underground coal mine. 2. Obligations of equipment manufacturers relative to mine safety regulations.	Caterpillar, Inc., R.M Wilson Co. Inc., and Thiele & Co. KG Babst Calland
5/7/2020	Deposition Circuit Court, Second Judicial District White County, Illinois No. 2018-L-03	1. Technical and operational aspects of fine refuse (slurry) disposal in an underground coal mine.	White County Coal, LLC Dentons
4/28/2020	Deposition U.S. Bankruptcy Court in the Southern District of Ohio, Western Division Case No. 19-56885 (JEH)	1. Impact of Coal Act liabilities on the viability of Murray Energy Corporation.	CONSOL Energy Inc. Bernstein-Burkley
3/27/2019	Deposition Commonwealth of Kentucky Pike Circuit Court, Division II C.A. NO. 17-CI-00846	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC
2/26/2019	Deposition Commonwealth of Kentucky Knott Circuit Court C.A. No. 16-CI-00159 & C.A. No. 16-CI-00238	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC
11/20/2018	Deposition In the Circuit Court of Buchanan County, Virginia Case No. CL17-204	1. Extent of mineable and merchantable coal. 2. Coal leasing practices in Central Appalachia.	Jewell Smokeless Coal Corporation Beveridge & Diamond, P.C.
10/12/2018	Marshall County Commission Board of Equalization and Review Marshall County, West Virginia PTD Active NR Account: 00587501	1. Calculation of in situ tonnage. 2. Market prices for Pittsburgh Seam barge and rail coal.	Murray Energy Corporation McNeer Highland McMunn and Varner, LC
9/19/2018	Deposition Commonwealth of Kentucky Letcher Circuit Court C.A. No. 15-CI-00310	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC
6/18/2018	Deposition Commonwealth of Kentucky Knott Circuit Court C.A. No. 16-CI-00159	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC
5/17/2018	Deposition Commonwealth of Kentucky Clay Circuit Court C.A. No. 16-CI-00283	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC

Date(s) of Testimony	Body/Agency Testified Before	Subject of Testimony	Client/Law Firm
5/9/2018	Hearing Court of Common Pleas Greene County, Pennsylvania Case Nos. 148-2016 - 161-2016	1. Market price of Pittsburgh Seam coal.	Consolidation Coal Company Dinsmore & Shohl
2/28/2018	Deposition Commonwealth of Kentucky 41st Judicial Circuit, Clay Circuit Court C.A. No. 16-CI-00283	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC
1/11/2018	Deposition Commonwealth of Kentucky Knott Circuit Court Civil Action No. 16-CI-00100	1. Mandatory safety requirements regarding coal mine dust control standards.	3M Company Thompson Miller & Simpson PLC